1986
HELICOPTER ANNUAL

A5190-14 3/86

Published by Helicopter Association International

$35.00

LOBBYING

ECONOMICS

HELIPORTS

EDUCATION

OPERATIONS

SAFETY

ETHICS

LEGAL

TECHNICAL

N109BB
N422GA

EXCELLENCE HAS NO EQUAL
. . . EVER.

The brilliantly engineered AGUSTA EXECUTIVE MKII is flown by many of the most prestigious corporations in America. It easily cruises at 175 mph with a quiet limousine ride and has a dispatch reliability record that's the envy of the industry.

For EMS deployment, here is the fastest and the most patient compatible EMS helicopter built . . . the AGUSTA EMS MKII . . . in service with some of this nation's leading medical centers. It is without question the most preferred of it's type.

Meet the magnificent Flagship of the MKII series . . . the spacious MKII WIDEBODY . . . it features the same dynamic performance as its industry leading stablemates, but with more passenger space as well as an expanded avionics capability. There is also a very impressive EMS version.

And, AGUSTA backs its full line of High-Performance helicopters with comprehensive support programs that are without equal.

We invite you to call our Marketing Department for more information.

AGUSTA
AVIATION CORPORATION

NORTH PHILADELPHIA AIRPORT, PHILA., PA 19154 TEL. 1 (215) 245-8860 TELEX 6851181

EFIM

GRUPPO AGUSTA — ***A World Force In Aerospace***

Agusta S.p.A. · Milano · Roma • Agusta International S.A. · Bruxelles · B • Agusta Aviation Corporation · Philadelphia · USA ★ **Helicopter Division** ★ Costruzioni Aeronautiche G. Agusta S.p.A. · Cascina Costa (VA) • E.M. Elicotteri Meridionali S.p.A. · Frosinone • E.H. Industries Ltd · London · UK ★ **Airplane Division** ★ SIAI Marchetti S.p.A. · Sesto Calende (VA) • Industria Aeronautica Meridionale S.p.A. · Brindisi • Caproni Vizzola S.p.A. · Somma Lombardo (VA) ★ **Systems Division** ★ Agusta Sistemi S.p.A. · Roma • O.M.I. Ottico Meccanica Italiana S.p.A. · Roma • Omica O.M.I. Corporation of America · Alexandria · USA • FOMB Fonderie ed Officine Meccaniche di Benevento S.p.A. · Benevento • M.V. Meccanica Verghera S.p.A. · Verghera di Samarate (VA) • SISDA Societa Italiana Sistemi d'Addestramento P.A. · Ciampino Aeroporto (Roma)

The 1986 Helicopter Annual
Publisher's Note

We are proud to present the Fourth Edition of the Helicopter Annual. We hope this comprehensive reference guide continues to be a valuable tool for the aviation community—particularly the rotary-wing segment.

The scope and depth of the Annual's contents have made the publication the most useful directory of its kind in the industry.

We thank the HAI members who contributed to the editorial content, including the manufacturers who supplied the technical data which makes the specifications sections in the Annual the industry's most in-depth buyer's reference guide. Our gratitude extends also to our advertisers. Without them, this 1986 Helicopter Annual would not have been possible.

We are particularly indebted to the Association staff for their enthusiasm and creative input. Their expertise has added tremendously to the breadth and usefulness of the Annual.

The Association believes that you will refer often to the Annual in the coming months, and hopes that it contains the kind of information needed to benefit your organization.

Please inform the editors if there are any changes, or with any new information you wish included in the 1987 Helicopter Annual.

Charles W. Johnson
Frank L. Jensen, Jr.

January 1986 *4th edition*

The 1986 Helicopter Annual is a publication of the Helicopter Association International. All rights reserved. No part of this publication may be reproduced, in whole or in part, or transmitted in any form or by any means without the advance written consent of the Helicopter Association International.

Helicopter
Association
International

HAI Headquarters
1619 Duke Street
Alexandria, Virginia 22314-3406
Telephone, 703-683-4646 Telex 89-615

Publishers
Charles W. Johnson
Frank L. Jensen, Jr.
Editor
Daniel P. Warsley
Associate Editor
Kate Miller
Contributors
John N. (Tony) Clark, Pratt & Whitney Canada
Vincent V. Colicci, Helicopter Services, Inc.
Robert Fox, Evergreen Helicopters, Inc.
Keith Fritz, U.S. Army Aviation Research and Development Command
James A. Hamilton, Bell Helicopter Textron, Inc.
Charles W. Johnson, ERA Helicopters, Inc.
Laurence J. Maloney, Frank B. Hall & Co.
Congressman Norman Y. Mineta
Robert Zincone, President United Technologies
Editorial advisory board
Public Relations Advisory Committee
Advertising coordinator
Barbara McLaughlin
Design & production
Summit Design & Marketing, Inc.
Design
William H. Clark
Layout & art
Michelle Elvy
Karl E. Lee
Barbara McLaughlin
Photography
The airframe manufacturers
Mark Brunson
HAI archives
John A. Pope
Andy Schenk
Darkroom
Mark Brunson
Typography
Terry Jones
Printing
William Byrd Press, Inc.
Pat Burton
ISSN 0639-5728

The most
efficient way
to reach
an industry

1986
HELICOPTER
ANNUAL

Space available
in 1987
secure your
position now

Call
703-683-4646

1986 Helicopter Annual Table of contents

Section I

Features, statistics and industry reference

5 *From Eisenhower to Reagan*
7 *The Helicopter Industry and the Aviation Trust Fund programs*
9 *Bridging the gap*
11 *An operator's perspective*
12 *Key helicopter statistics*
18 *World civil helicopter records*
20 *Specialized aviation organizations*
25 *Key publications in the world of helicopter operations*
27 *Civil aviation officials worldwide*
32 *U.S. civil aviation policymakers*

Section II

1986 Helicopter Annual buyer's guide

33 *Direct operating costs and safety*
34 *Civil helicopter specifications*
59 *The glass cockpit*
60 *Avionics specification guide*
87 *Engines...low operating costs and high reliability as primary goals*
88 *Engine manufacturers specification guide*
93 *An eternal triangle*
95 *Insurance rates reflect claims paid*
97 *Economic maturity is close at hand*
99 *Technical committee enhances safety*
101 *Associate members product and service directory*

Section III

Helicopter Association membership directory

112 *Alphabetical listing of operators worldwide*
152 *Geographic matrix of U.S. member operators by operation*
163 *Geographic matrix of International member operators by operation*
167 *Directory of HAI associate members*
186 *Directory of HAI sustaining members*
190 *Helicopter Association International annual review*
197 *Association programs and structure*

Index of advertisers

A&A/Reed Stenhouse	96
Aerospatiale	32B
Agusta	Cover 2
Airwork	100
Allison Gas Turbines	112, 113
Atc Flight Simulator	79
Avco Lycoming/Textron	86
Aviation Fuel Cells	168
Aviation Instrument Mfg.	102
Aviation Instrument Serv.	103
Aviation Materials	169
Aviation Mechanic's Journal	19
Bayly, Martin, Fay	94
Bell Helicopter/Textron	41
Boeing Vertol	Cover 3
Business/Commercial Aviation	22, 23
California Helicopter	45
Casey	106
Castleberry Instruments & Avionics	58
David Clark	111
Canadian Aviation	109
Columbia Helicopters	121
Cyberstar	173
DeVore Aviation	68
E H Industries	47
Embry-Riddle	15
Evergreen Helicopters	125
Fairchild Industries	8
Fitz-Wright	49
General Electric	32A
Helicopter Foundation	16, 133
Helicopter International	21, 184
Helicopter Leasing	13
Helicopters Magazine	89
Interavia	24
Marvel Manufacturing	177
MBB Helicopter	51
McDonnell-Douglas	52
II Morrow Electronics	75
National Airmotive	92
Negretti Aviation	178
Northern Airborne Technology	62
Perkins	180
Pooley's Fuel Filter	179
Pratt & Whitney	6, 42
Robinson	123
Rogers Helicopters	144
Rollins, Burdick, Hunter	98
Rotor Blades	181
SL Auburn	182
Saft America	36
Schweizer Aircraft	54
Sikorsky Aircraft	Cover 4
Southern Air Transport	17
Turbomeca	105
Westland	57
Zig-Zag Papers	108

Photo: Andy Schenk

From Eisenhower to Reagan...

More than twenty-eight years ago, President Dwight D. Eisenhower became the first United States president to take regular advantage of the helicopter as a safe, responsive and reliable vehicle.

Every president since "Ike" has followed his forward-thinking yet practical decision. Presidential helicopters have landed with increasing regularity—lifting our nation's top leaders safely and quickly over the ground-traffic congestion to departure airports, to Camp David or to other destinations.

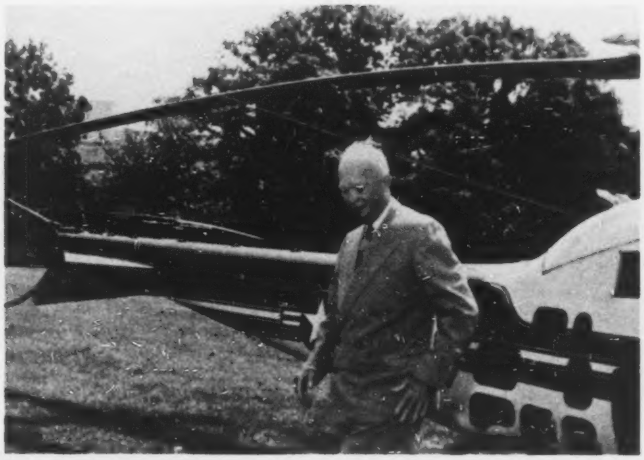
No other machine—ground or air—can match the helicopter for this purpose.

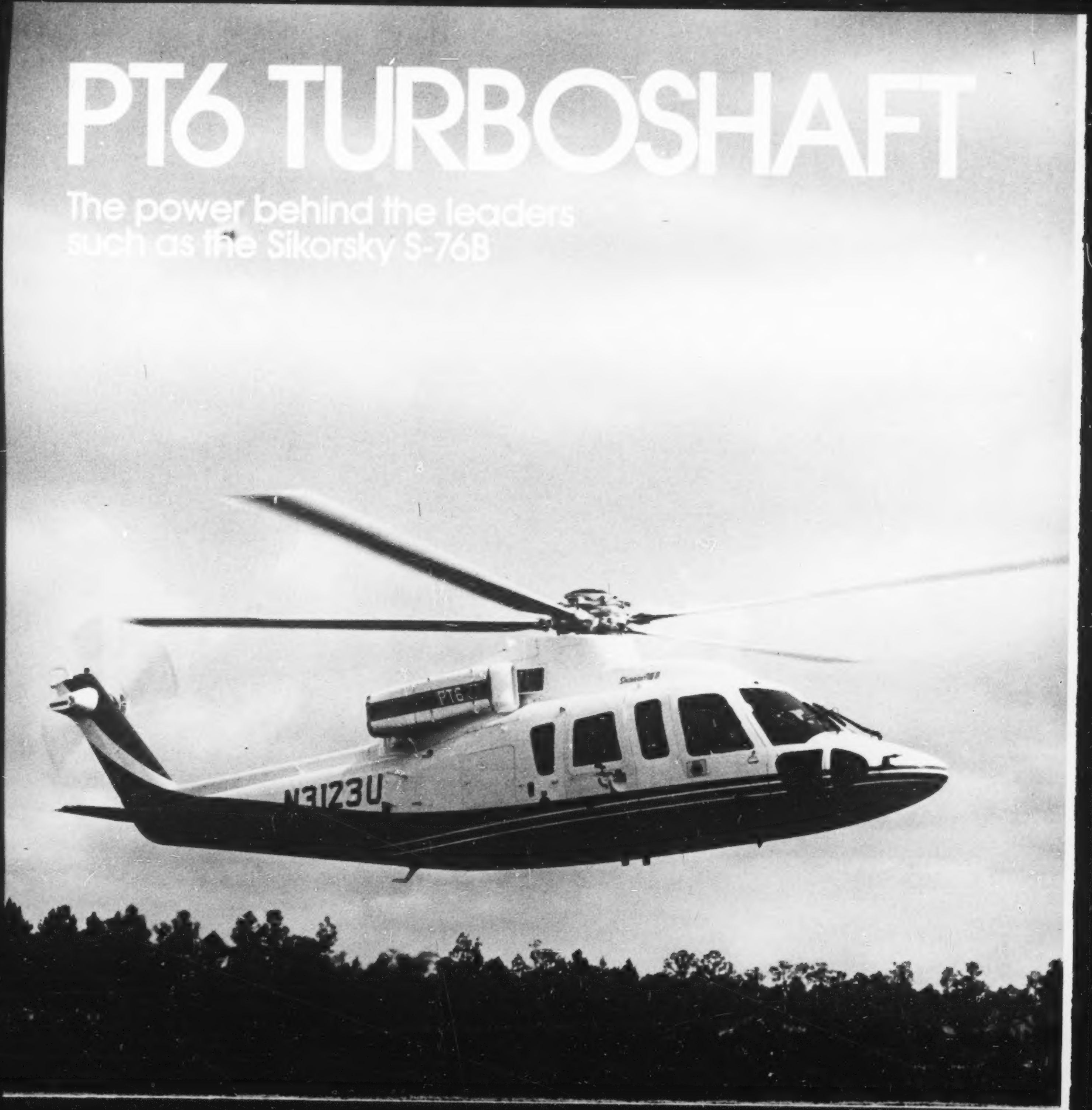
Over the years, the six presidents who have occupied the White House since President Eisenhower's Administration have depended more and more on the helicopter—not only for their own transportation, but also for their families, visiting dignitaries, and even family pets!

President Reagan is no exception. Here we see the President and Mrs. Reagan embarking on yet another safe trip aboard their official helicopter.

We are pleased and proud that the White House Helicopters, their flight crews and support personnel have become so important to the daily lives of our presidents.

And we are especially proud that seven of our presidents have agreed with HAI's belief that helicopters are truly Essential and Economical.




PT6 TURBOSHAFT
The power behind the leaders such as the Sikorsky S-76B
PT6
N3123U

UNITED TECHNOLOGIES
[illegible]

The Helicopter Industry and the Aviation Trust Fund Programs

by Congressman Norman Y. Mineta

Chairman, Subcommittee on Aviation,
Committee on Public Works
and Transportation
U.S. House of Representatives

Next year the Congress begins to consider the renewal of the Airport and Airway Trust Fund, the user taxes that support the Trust Fund, and the programs that are the Trust Fund's reason for existence, beyond 1987.

The helicopter industry should begin thinking now as to what its needs will be in the late 1980s and early 1990s with respect to the federal aviation programs. The industry should also direct its attention to the broader budget and deficit reduction issues winding their way through the Congress, because the resolution of those issues will likely have a direct bearing on the future size and direction of the federal role.

Some of the deficit reduction proposals would require across-the-board cuts in all federal programs without any priority consideration of the future needs of an area such as aviation in contrast with other areas. Nor would consideration be given to the fact that aviation programs are supported by user fees, and not by the general taxpayer.

Though much of the debate on these matters may be arcane to the uninitiated, the impact of some proposals would be detrimental, if not devastating, to the future growth of aviation, including the helicopter industry.

In the 1982 Act, Congress recognized that the helicopter industry was one of the fastest growing areas in the aviation field, and that its need should be part of the revitalization and modernization of our nation's airport, air traffic control and navigation systems. For the first time, federal airport legislation recognized the benefits from development of public-use heliports by requiring in the Act's Declaration of Policy that reliever heliports be included in the programs funded by the Act.

To carry out that policy, over $9.6 million has been committed to heliport planning and development grants. I believe we can expect the list of communities considering, planning and actually building heliports to continue to expand.

But I do not have to tell you that development of public heliport facilities is an uphill struggle in many places. Considerable time and resources must be expended to educate city leaders, the business community and local citizens of the positive impact rotorcraft operations can bring to their community. In many areas, there is outright hostility when proposing central city heliports, a hostility that goes beyond the usual indifference people in the helicopter industry experience.

One of the major obstacles the fixed-wing industry faces in future expansion of airports is the environmental impact of aircraft noise. In fact, environmental considerations are shrinking airport capacity in some places. The impact of noise must be addressed in meaningful, tangible ways if the growth anticipated in aviation is going to be accommodated.

The future of intra-city helicopter use faces similar problems, perhaps even more pronounced. If the helicopter industry wants to achieve its potential as a central city people-mover, it must convince people that the noise impact will be minimal and acceptable.

In the context of the Aviation Trust Fund programs, if the helicopter industry believes that the role established in the 1982 Act for the helicopter industry's development and growth should continue, the helicopter industry must convince people in local government and business, as well as private citizens, of the benefits helicopters can bring to their communities.

So, as we move toward the reauthorization of the Trust Fund programs, the helicopter industry should establish its priorities with respect to the Trust Fund programs and demonstrate to policymakers at all levels of government that those priorities have a place in our aviation infrastructure.

As the Subcommittee begins considering the future of the Aviation Trust Fund programs and how those programs will address the needs of the helicopter industry, we must hear from these local community interests that they recognize the benefits of helicopter development.

Congress must hear from local community interests that the helicopter industry's priorities are also the communities' priorities. When the Congress considers these programs, the perspective of local community needs and interests are of great importance. This is true for the fixed-wing industry, and it will be no different for the rotorcraft industry.

Even though these are federal programs, your job of selling or promoting the helicopter industry will be mostly at the local level. So, if you have a story to tell, start telling it.

Congressman Norman Y. Mineta (D-Ca) is Chairman of the Subcommittee on Aviation of the House Committee for Public Works and Transportation. He is the keynote speaker for HAI's 38th Annual Meeting & Exposition.

Congressman Mineta represents California's 13th District located at the tip of San Francisco Bay. He served on the House of Representative's Budget Committee on Intelligence.

Congressman Mineta received a B.S. degree in Business from the University of California at Berkeley in 1953. After graduation, he joined the U.S. Army and served as a military intelligence officer in Japan and Korea.

In 1956, he left active service and attained the rank of Major in the Army Reserves. In 1962, he became a member of the City of San Jose's Human Relations Commission.

In 1967, he was appointed to fill a vacancy on the city council becoming the first ethnic minority member of the council in the city's history.

He was elected Mayor of San Jose in 1971 becoming the first Japanese-American mayor of a major U.S. city. In 1974, he won the seat vacated by a retiring Republican Congressman, and joined his fellow Democrats in the 94th Congress.

During the 99th Congress, he retains his post as Chairman of the Subcommittee on Aviation, and has joined the Subcommittee on Water Resources. He has returned to the Committee on Science and Technology, and continues to serve on the Subcommittee on Space Science and Applications, the Subcommittee on Science and Research and Technology, and the Subcommittee on Energy Development and Applications.

The Fairchild Vapor Cycle Cooling System

Helicopters with air cycle cooling systems literally "bleed" part of the compressed air from the engine to make this system work.

This means that air cycle cooling systems also bleed the engine of some of its power. The helicopter's lift capability is reduced. Its duration and range of flight are reduced. And when the aircraft is on the ground, the system cannot even provide adequate cooling. This results in sweltering cabin conditions on hot days. In other words, when you bleed compressed air from the engine with an air cycle cooling system, you also bleed the engine of its efficiency.

Fairchild Control's vapor cycle cooling system does not bleed air from the engine. It's a closed loop cooling system that utilizes fresh air, not bleed air. The operating advantages are enormous.

For example, a modern twin-turbine helicopter can gain up to 7% more usable SHP and use 4% less fuel. Lift capability is far greater, especially in high-hot conditions. Range and duration are markedly increased. This improved performance means greater safety and fewer flight limitations. You travel in a comfortable environment with five tons of cooling available in flight or while idling on the ground.

Fairchild Controls is the number one company in vapor cycle cooling. These systems are lightweight, compact, and designed to aerospace quality standards. Fairchild has been building them for over 25 years. This is why leading helicopter manufacturers request the Fairchild vapor cycle cooling system. And why they are installed in the U.S. Presidential helicopter fleet.

For more information about the Fairchild vapor cycle cooling system, call or write to Fairchild today. We're doing something about the problem of bleeding helicopters.

Fairchild Control Systems Company
1800 Rosecrans Ave.
Manhattan Beach, California 90266
Tel. (213) 643-9222 Telex 910-325-6216

FAIRCHILD
CONTROL SYSTEMS COMPANY

Bridging the Gap

by Robert Zincone

Combining the efforts of HAI and AHS can lead to benefits for manufacturers and operators alike.

For many years as a member of the helicopter industry I have watched with concern the communications gap that still persists today between rotary wing designers and manufacturers on the one hand, and civil operators of rotorcraft on the other. Locked into our respective professional associations, AHS and HAI, we two groups have managed to stay at arms' length from one another over the years, paying little more than lip service to the idea of cooperative efforts. This separation of builder and user has, I believe, seriously hobbled the development of commercial helicopter operations, and contributed to a general feeling among operators that the manufacturing industry is indifferent to their needs.

This year, during my tenure as 1985-86 president of the American Helicopter Society, I find myself in a position at last where I can do something about bridging the gap, and I have placed this task at the top of my list of priorities. I am convinced that a joint approach to meeting the needs of the civil helicopter operator is long overdue, and can only result in benefits to both parties in the years to come.

The origins of the traditional gulf between the manufacturer members of the HAI can probably be traced back more than thirty years to the early days of the industry. The struggling first steps of the industry in the late 1940's were concerned equally with civil and military applications, but it was the influx of military R & D investment, spurred initially by the demands of the Korean War, that allowed the technical evolution of the helicopter to advance. This stream of funding, flowing more or less constantly to the leading manufacturers over the ensuing three decades, virtually guaranteed a technical orientation towards the military operator and his special needs. The military operator, then as now, was concerned first and foremost with flight performance, payload, survivability and optimization of the platform to his special mission needs. There was little emphasis on cost or logistical supportability.

As you are all well aware, civil operators were forced from the outset to accept, and adapt, helicopters that had been developed as military machines. The hard fact of life was that since the operators were unable to come up with the substantial up-front investments required, they could not expect to attract the attention of the technical community to the characteristics that affected them most — namely low DOC's, maintainability, reliability, safety and community acceptance.

It is interesting to consider here the different course taken by the fixed-wing industry, developing some thirty years ahead of its rotary wing counterpart. Thanks largely to massive government support during the 1920s and 30s, civil fixed-wing aviation was permitted to develop in parallel with military aviation, to the point that by the mid-1960s, both civil and military branches could be considered to be both technically and operationally mature. The fact that the fixed-wing industry also has separate professional organizations, with ATA performing a lobbying function on behalf of the airlines, and AIAA, ASME and SAE catering to technology interests is, therefore, irrelevant since the needs of the civil user were fully understood by the individual manufacturers working competitively.

Contrast this with the helicopter industry. We might consider the helicopter to have achieved today a technological maturity of the order of 90%. But clearly, the remaining 10% can be acquired only slowly and probably at great expense. Operationally, if we are to be honest, the helicopter may be considered to have attained little more than 50% of its maturity, and most of that 50% must be related to military operations. Indeed, looking strictly at civil helicopter operations, it is difficult to identify a measurable advance in the state of the art over the past two decades.

The need is, therefore, clear. We must begin to find ways of transferring the focus of our technical community's interest from the further marginal optimization of the platform to improving the efficiency of the entire operation, including all of the elements that contribute to system life cycle cost. For those of us in AHS, I believe that requires that we broaden our horizons to understand more fully the after-sales side of the business, re-examining the cost drivers in the life cycle cost equation. We must achieve significant advances in reliability and readiness. We must reduce scheduled maintenance to a minimum, and unscheduled to zero. We must aim for safety levels similar to those enjoyed by fixed-wing airline aircraft. And, in terms of community acceptance, we must try to be invisible and inaudible.

If we are to reach these goals, we must establish a better flow of civil user requirements to the technical community, and a stronger awareness among engineers of the significance of these factors, and of the importance of recognizing them early in the design and development process.

How do we bring about this change? A useful first step might be to arrange a merger between selected committees of the two organizations to form a single joint-discussions committee. Informal discussions are already in progress with regard to selecting the right candidates for such a merger, and I hope to achieve some positive action along this routed ring the next year. Another possible avenue for cooperation is the joint sponsorship of specialist meetings, a route that we have followed all too rarely in the past.

If we recognize the need and the desire to communicate on both sides, then the mechanism for formalizing that contact should follow easily. There is no question that the results should generate benefits to manufacturers and operators alike in the years to come.

Mr. Zincone serves as the 1985–1986 President of the American Helicopter Society, in addition to his duties as President of United Technologies Sikorsky Aircraft Division. His responsibilities at Sikorsky Aircraft cover Engineering Research and Development, all Production and Development programs, Product Integrity, Materiel Procurement, Administrative and Computer functions, as well as serving as the Chief Executive Officer.

In his 30-year career at Sikorsky, Mr. Zincone has served in a succession of key engineering department posts including Supervisor of Rotor Systems Design, Chief of Aircraft Design and Development, Chief Engineer and Senior Vice President for Research and Engineering. He holds seven patents for helicopter component design, achievements and was awarded United Technologies' George Mead Medal for achievements in design of the advanced titanium/composite rotor blade.

A native of New York City, Zincone earned a certificate in aeronautical engineering from the Academy of Aeronautics in New York. He holds a Bachelor's Degree in Mechanical Engineering from the University of Bridgeport and a Master's Degree in Engineering Mechanics from Columbia University. He has written numerous articles on helicopter technology, and in addition to his American Helicopter Society service, he holds memberships in numerous professional and technical societies, including the Army Aviation Association of America, the American Institute of Aeronautics and Astronautics, the Society of Automotive Engineers, the American Society for Metals and the American Society of Mechanical Engineering.

OPERATOR MEMBER
ASSOCIATE MEMBER
SUSTAINING OR STUDENT MEMBER

Be a leading exponent of the helicopter industry

...by becoming a member of HAI.

Even a modest increase in membership means an exponential increase in our ground effect.

The HAI enjoys a worldwide reputation as the focal point and principal forum of the civil helicopter industry.

And the direct benefits HAI offers its members provide an immediate return on the investment. Services and benefits run the gamut—from The Helicopter Annual to management and safety seminars designed specially for helicopter operators.

There are three membership categories. Helicopter operators, associate members (suppliers to the industry) and sustaining members (individuals who wish to support the growth of the helicopter industry).

Joining will give you an excellent benefit package now, and will increase the magnitude of HAI's efforts on behalf of the entire industry.

For a free information package on HAI membership, return the postpaid card on page 80,
or call the Helicopter Association International.
1619 Duke Street, Alexandria, VA 22314-3406. Telephone: 703-683-4646. Telex: 89-615.

**Helicopter
Association
International**

An operator's perspective

by Charles W. Johnson

I was asked to write an introduction to this section of the 1986 Helicopter Annual from my viewpoint as a commercial helicopter operator, and not necessarily as incumbent Chairman of HAI.

For openers, I would like to recognize that *all* helicopter operators have certain mutual interests, notably safety, economy, and public acceptance. *At least* within those areas, we should all truly cooperate with each other, to the maximum extent which is feasible.

Many persons will have occasion to refer to the listing of civil operators in the directory section. Very likely, readers will include prospective customers, as well as individuals who are conducting marketing analyses as part of a sales effort. And, of course, these lists will be perused by helicopter operators... possibly checking out the competition, or perhaps with some other business purpose in mind.

As an operator, I would like to offer a few thoughts as follows:

- To those manufacturers who have taken positive action to help reduce operating costs, I offer sincere appreciation. Together, we may yet save this important industry.
- To those relatively few manufacturers who do not seem to understand the need for simplicity, reliability and maintainability, I extend an urgent request that you climb down from your ivory tower and examine the situation within your marketplace.
- To prospective customers for helicopter services, I suggest that you consider *first* the commercial operators who are HAI members. They may be identified by the complete listing and bold print. The non-members listing is quite abbreviated, showing only company name and city and state in which located.
- To my fellow operators, whether commercial, corporate or public/private, I ask you (1) to consider the importance of having a strong, unified voice, and (2) to further consider HAI as being the best forum in which to develop that voice. Admittedly, HAI has had its problems. However, I ask if you have been part of the problem, or are you part of the solution?

In closing, I refer *all* readers to the Code of Ethics contained elsewhere in this Annual. Please review these well-thought-out guidelines which have stood the test of time. I believe that everyone will benefit from close adherence to this code, and I invite you to join with me in living up to these high standards.

Please accept my best wishes for an outstanding new year, with safe flying for all of us.

Chuck Johnson, 43, is Executive Vice President, a Director and Gulf Coast Division Manager of ERA Helicopters, Inc. Chuck was born in Syracuse, New York where he lived until entering the Army in 1962. After completing a tour of duty on Okinawa, he entered Army warrant officer candidate school in 1964 and upon graduation as an Army aviator, he was deployed to Vietnam in August, 1965, as a medevac pilot with the 1st Air Cavalry Division.

Serving his remaining two years in the service as a border patrol pilot in Germany, he was released from active duty in 1968 as a Chief Warrant Officer.

In September 1968, Johnson joined ERA helicopters in Alaska where he flew such varied assignments as offshore, firefighting, soil sampling, and construction on the North Slope.

In 1970-71, Johnson flew as a pilot on and managed ERA's first foreign contract in Nicaragua and Honduras. After working for a year in ERA's administrative offices in Anchorage, he Joined Evergreen Helicopters of Alaska as Alaska Operations Manager in 1973.

Just prior to construction of the Alaska pipeline, Chuck joined Bechtel, Inc. where he was aviation operations supervisor on the Alyeska Pipeline Project. His duties included contracting and operational supervision of over 50 helicopters and airplanes during the pipeline construction.

Upon rejoining ERA in 1977, Chuck became director of marketing and then vice president of the Gulf Coast Division in 1979.

Johnson has been active in the HAI's Regulatory Review Program where he has made many trips to Washington, D.C., New Orleans and Houston on the membership's behalf. He holds an Airline Transport Pilot rating in helicopters and a commercial rating in multi and single engine airplanes and single engine seaplanes. Chuck resides in Lake Charles, Louisiana,

Key helicopter statistics

The most requested statistical data about helicopters.

HAI continues to be a focal point for requests for information on statistics of all kinds on our industry. For the most part, we have to rely on government sources such as the NTSB and FAA for statistics. Everything from the helicopter population in the U.S. to the helicopter pilot population, to the hours flown comes from these government data bases. In some cases there are two or more sources for the same data. For example, the number of accidents in a given year are recorded by both the NTSB and the FAA. While both agencies use the same definition to define an accident, the NTSB can choose not to investigate an accident or delegate the investigation to the FAA. For this reason, the two agencies may not show the same number of accidents for a given year. This is just one example of the problems that make it difficult to pinpoint where the industry is in areas such as accident rates, or even hours flown.

The HAI is continuing its efforts to provide better statistics on our industry, both nationally and internationally. We have carefully reviewed the statistics and they are the most accurate available. We will continue to work with the NTSB and FAA, Transport Canada, and other government agencies as well as continue to develop our own, in order to provide more accurate data on our industry.

Total U.S. helicopter fleet by model and series

(as of November 1984)

According to the Insured Aircraft Title Service, there were approximately 9500 helicopters in the United States in 1984. The following section breaks out the fleet by manufacturer, model and series.

Manufacturer	Model/ series	Type of engine	No. of engines	No. of aircraft
Aerospatiale	SA 313	Turbine	1	3
	SA 315	Turbine	1	90
	SA 316	Turbine	1	48
	SA 318	Turbine	1	27
	SA 319	Turbine	1	4
	SA 330	Turbine	1	12
	SA 332	Turbine	2	5
	SA 341	Turbine	1	46
	SA 350	Turbine	1	272
	SA 355	Turbine	2	174
	SA 360	Turbine	1	12
	SA 365	Turbine	2	10
		Total Aerospatiale		**703**
Agusta	A 109	Turbine	2	69
	AB 206	Turbine	1	2
			Total Agusta	**71**
Bell	47 (All)	Recip	1	1526
	204, 205	Turbine	1	252
	206 A/B	Turbine	1	1754
	206L (All)	Turbine	1	645
	212	Turbine	2	162
	214 A/B	Turbine	1	17
	214 ST	Turbine	2	19
	222 (All)	Turbine	2	98
	301	Turbine	2	2
	400	Turbine	2	3
	412	Turbine	2	54
			Total Bell	**4532**
Boeing Vertol	107 (All)	Turbine	2	11
	H21	Recip	1	10
	CH47	Turbine	2	8
	234	Turbine	2	4
	42A	Recip	1	3
	PV18	Recip	1	1
		Total Boeing Vertol		**37**
Enstrom	F-28	Recip	1	350
	T-28	Turbine	1	2
	280 (All)	Recip	1	151
			Total Enstrom	**503**
Hiller	UH-12	Turbine	1	19
	UH-12	Recip	1	584
	OH 23 (All)	Recip	1	156
	HH 120	Recip	1	1
	HJ-1	Unk	1	1
	YH 32	Unk	1	2
	YROE-1	Recip	1	1
			Total Hiller	**764**
Hughes	269 (All)	Recip	1	766
	369 (All)	Turbine	1	733
	500 (All)	Turbine	1	15
	OH6 (All)	Turbine	1	10
	TH55 (All)	Recip	1	121
			Total Hughes	**1645**
MBB	BO-105C	Turbine	2	51
	BO-105S	Turbine	2	68
	BO-105/ CBS	Turbine	2	8
	BK-117	Turbine	2	22
			Total MBB	**149**
Robinson	R22 (All)	Recip	1	331
			Total Robinson	**331**
Sikorsky	R4	Recip	1	4
	R5	Recip	1	1
	R6	Recip	1	1
	S-51	Recip	1	9
	S-52	Recip	1	16
	S-55/ H-19	Recip	1	122
	S-55B	Turbine	1	8
	S-56/ H-37	Recip	2	47
	S-58/ H-34	Recip	1	142
	S-58T	Turbine	1	46
	S-61/ H-3	Turbine	2	20
	S-62	Turbine	1	7
	S-64	Turbine	2	7
	S-70	Turbine	2	3
	S-72	Turbine	2	2
	S-76	Turbine	2	153
			Total Sikorsky	**588**
Westland	WS-55	Turbine	1	1
	WG-30	Turbine	2	9
			Total Westland	**10**

Number of helicopters by manufacturer and percent total fleet

(as of September 1, 1985)

Manufacturer	Helicopters titled	Percent total
Aerospatiale	703	7.25
Agusta	71	0.73
Bell	4532	46.75
Boeing Vertol	37	0.38
Enstrom	503	5.19
Hiller	764	7.88
Hughes	1645	16.97
MBB	149	1.54
Robinson	331	3.41
Sikorsky	588	6.07
Westland	10	0.10
Other	385	3.97
Total	**9718**	**100.0**

Source: Insured Aircraft Title Service

U.S. Civil Helicopter Production

Year	Domestic	Export	Total
1970	150	332	482
1971	171	298	469
1972	319	256	575
1973	342	428	770
1974	433	395	828
1975	528	336	864
1976	442	315	757
1977	527	321	848
1978	536	368	904
1979	570	459	1,029
1980	841	525	1,366
1981	619	453	1,072
1982	333	254	587
1983	187	216	403
1984	143	233	376
Total	**6,141**	**5,189**	**11,330**

Source: AIA, GAMA, Department of Commerce

U.S. exports of civil helicopters

Region of Destination	1980	1981	1982	1983	1984
Canada Greenland	91	78	17	16	8
Latin America Caribbean	143	140	63	38	32
Europe	118	71	49	51	89
Middle East	21	21	13	48	12
Asia	57	70	38	44	62
Oceania	72	32	21	8	25
Africa	23	41	53	11	5
Total Exported	**525**	**453**	**254**	**216**	**233**
Value in Millions of Dollars					
Canada Greenland	$ 42.9	$ 40.6	$ 15.2	$ 9.7	$ 4.1
Latin America Caribbean	78.4	89.5	49.5	47.0	42.0
Europe	79.4	91.8	42.0	50.7	52.8
Middle East	24.9	27.2	12.9	48.6	16.3
Asia	51.3	65.3	50.4	59.2	107.5
Oceania	16.3	19.5	10.6	1.1	9.3
Africa	5.5	12.5	25.3	15.8	1.8
Total Value	**298.7**	**346.4**	**205.9**	**232.1**	**233.8**

Source: U.S. exports, Schedule B, commodity by country

U.S. imports of civil helicopters

Country of Origin	1980	1981	1982	1983	1984
France	167	193	167	46	13
Germany	9	12	15	48	16
Italy	1	8	1	1	30
United Kingdom			1	5	2
Total Imported	**177**	**213**	**184**	**100**	**61**
Value in Millions of Dollors					
France	$48.4	$92.4	$ 74.2	$36.9	$14.9
Germany	4.4	6.9	8.9	35.8	9.7
Italy	1.1	6.1	1.1	.8	19.2
United Kingdom			.7	13.3	7.5
Total Value	**$53.9**	**$105.4**	**$ 84.9**	**$89.5**	**$51.3**

Source: U.S. Imports for consumption and general imports

Soaring To New Heights In Helicopter Support

Tailbooms To Complete Airframes
(Exchange or Outright Sales)

New or Overhauled Parts
& Components
Over 80,000 Line Items In Stock

Specializing In Late Model Turbine
& Piston Helicopters
Schweizer Distributor

Bell Helicopter Textron
McDonnell Douglas Helicopters
Schweizer
Aerospatiale
MBB Helicopter
Aviall
Teledyne Neosho

Complete Aircraft Refurbish &
Modification Facility
100 hour Inspection to Component
Overhaul

Helicopter Leasing & Services, Inc.
4616 W. Alva Street
Tampa, Florida 33614

(813) 877-7670
Telex 526590 HLS TPA

The FAA, on the other hand, is most interested in the active fleet. They define an active aircraft as one which has flown at least one hour in the preceding year. The table below shows the active helicopter fleet in the North America for the year 1982.

Civil helicopter fleet

Operators

Country	Total	Commercial	Corp/exec	Civil govt
U.S.	2,441	1,060	1,058	323
Canada	244	125	100	19
Mexico	3	3	—	—
Total	**2,688**	**1,188**	**1,158**	**342**

Helicopters

Country	Total	Commercial	Corp/exec	Civil govt
U.S.	7,388	4,627	1,575	1,186
Canada	1,464	1,215	153	96
Mexico	32	32	—	—
Total	**8,884**	**5,874**	**1,728**	**1,282**

Source: Aerospace Industries Association

Civil helicopter operators and helicopters operated in North America U.S., Canada, Mexico and Puerto Rico

Year	Total	Commercial	Corp/exec	Civil govt.[a]
Civil helicopter operators				
1965	860	508	299	53
1966	933	519	353	61
1967	1,023	522	427	74
1969	1,379	689	596	94
1971	1,424	672	590	162
1972	1,491	758	566	167
1973	1,532	752	599	181
1974	1,536	725	608	203
1975	1,891	779	833	279
1976	2,330	911	1,082	337
1977	2,547	959	1,219	369
1978	3,003	1,126	1,515	362
1980[b]	2,573	1,065	1,160	348
1982	2,688	1,188	1,158	342
Helicopters operated[a]				
1965	2,053	1,537	401	115
1966	2,318	1,699	475	144
1967	2,438	1,764	487	187
1969	3,433	2,390	770	273
1971	3,874	2,605	802	467
1972	4,185	2,992	745	448
1973	4,601	3,295	780	526
1974	4,819	3,418	778	623
1975	5,222	3,342	1,056	824
1976	6,181	3,702	1,392	1,087
1977	7,160	4,294	1,578	1,288
1978	8,023	4,904	1,891	1,228
1980[b]	8,575	5,581	1,635	1,360
1982	8,884	5,874	1,728	1,282

Source: Aerospace industries Association
a. Effective 1982, includes Mexico.
b. Federal, state and local governments.
c. Includes some helicopters on order.
d. Because computerization of the Directory data resulted in the elimination of some duplication of operator and helicopter listings, 1980 and subsequent data are not comparable with those of previous years.

Active pilots by type of certificate
(thousands)

Calendar Year	Total[3]	Student	Private	Commercial	Airline Transport	Helicopter	Glider[1]*	Lighter than air	Instrument Rated[2]
1973[2]	714.6	181.1	299.0	182.4	38.1	6.0	4.3	3.0	186.0
1974	733.7	180.8	305.8	192.4	41.0	5.6	4.8	3.2	199.3
1975	728.2	177.0	305.9	189.3	42.6	4.9	5.3	3.1	204.0
1976	744.2	188.8	309.0	187.8	45.1	4.8	5.8	3.0	211.4
1977	783.9	203.5	327.4	188.8	50.1	4.8	6.2	3.1	226.3
1978	798.8	204.9	337.6	185.8	55.9	4.9	6.5	3.2	236.3
1979	814.7	210.2	343.3	182.1	63.7	5.2	6.8	3.4	247.1
1980	827.0	199.8	357.5	183.4	69.6	6.0	7.0	3.7	260.5
1981[2]	764.2	179.9	328.5	168.6	70.3	6.5	7.4	3.0	252.5
1982	733.3	156.4	322.1	165.1	73.5	7.0	7.8	1.4	255.1
1983	718.0	147.2	318.6	159.5	75.9	7.2	8.1	1.3	254.3

Source: FAA

Estimated: 1980 is based on a 27-month criteria only. Other years are based on a 25-month criteria.

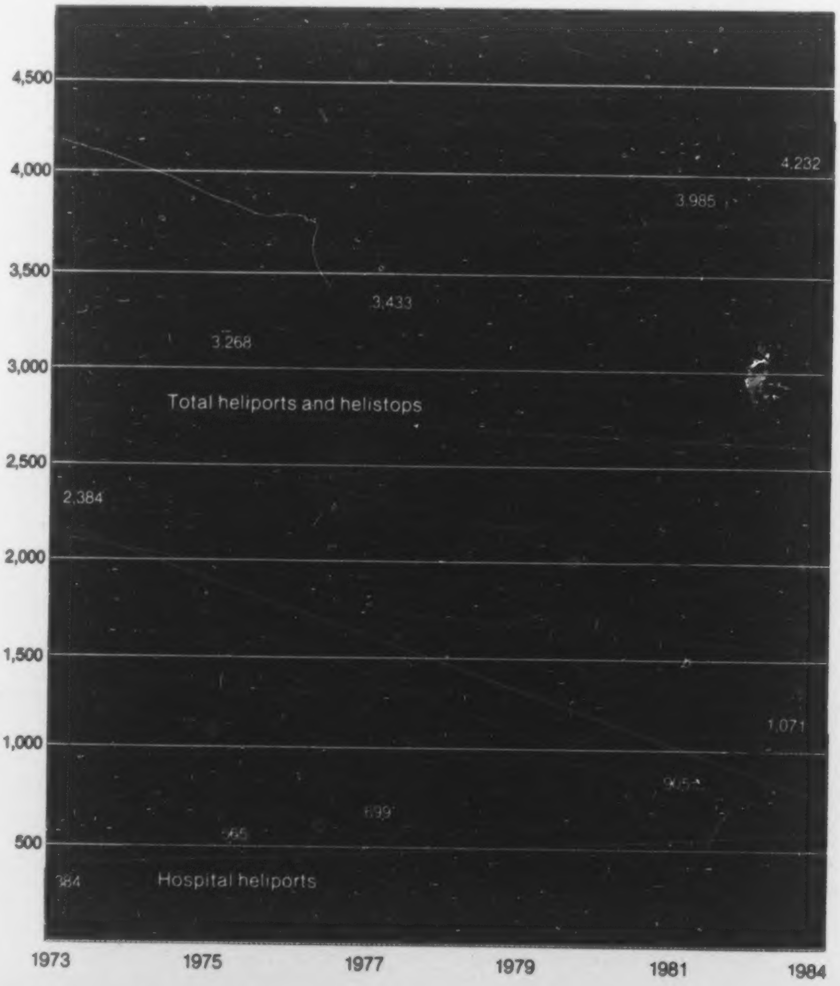
*Glider and lighter-than-air pilots are not required to have a medical examination; however, the totals above represent pilots who received a medical examination.

[1] Numbers represent all certificates on record. No medical examination required.

[2] The decrease in the number of airmen resulted from a purging of the airmen certification files. During this process, approximately 26,000 duplicates or faulty records were eliminated.

[3] Due to rounding, numbers may not add to stated total.

Heliports and helistops
U.S., Canada and Puerto Rico



Heliports and helistops

The following chart, compiled by the Aerospace Industries Association reveals a continuing increase in the number of heliport and helistop facilities in the United States, Canada and Puerto Rico. The chart shows 4,232 heliports and helistops, compared to 3,985 in 1981, an increase of 6%.

There is a notable increase in the number of Hospital Helistops. In 1981 there were 906. There are 1,071 reported in 1984. This represents more than an 18% increase for that period and an even more impressive increase over the 1965 total of 34. Today, 78 of these hospitals operate helicopter ambulance services, compared to 46 operating in 1981. 31 states have one or more agencies operating ambulance helicopters.

Of the 4,232 heliports and helistops, 384 are rooftop and 3,848 are ground level. In addition there are facilities on the hundreds of oil rigs and platforms in the Gulf of Mexico and off the coast of California.

Only 333 (8%) of those listed are public use — down from the 1981 total of 348.

Region	1973	1975	1977	1981	1984
New England	78	143	164	168	172
Middle Atlantic	581	684	795	727	793
East North Central	307	411	397	718	640
West North Central	110	98	107	164	215
South Atlantic	204	352	306	416	511
East South Central	64	107	144	203	192
West South Central	217	338	339	409	551
Mountain	176	241	213	268	312
Pacific	551	789	821	734	634
Puerto Rico	24	30	73	71	65
Canada	72	75	74	107	147
Total	**2384**	**3268**	**3433**	**3985**	**4232**
Elevated facilities	241	277	299	319	385

Source: Aerospace Industries Association, "Directory of Heliports in the U.S., Canada, Puerto Rico, 1984."

Hospital heliports

Region	1973	1975	1977	1981	1984
New England	5	16	21	31	30
Middle Atlantic	42	55	73	93	107
East North Central	99	126	150	193	193
West North Central	21	22	29	69	97
South Atlantic	50	76	82	135	176
East South Central	18	29	54	171	76
West South Central	26	59	67	77	110
Mountain	32	56	67	88	98
Pacific	87	119	147	135	167
Puerto Rico	—	—	2	2	3
Canada	4	7	7	11	14
Total	**384**	**565**	**699**	**905**	**1071**

Source: Aerospace Industries Association, "Directory of Heliports in the U.S., Canada, Puerto Rico, 1984."

Helicopter flying hours

General aviation, U.S. and Canada

Year	U.S.	Canada
1972	1,000,000	252,159
1973	1,168,239	266,000
1974	1,424,310	283,174
1975	1,546,520	318,018
1976	1,706,973	321,395
1977	1,867,644	343,418
1978	2,227,651	349,777
1979	2,555,187	484,879
1980	2,339,000	590,844
1981	2,684,911p	618,199
1982	2,350,231p	501,287
1983	2,271,377p	432,498

N/A—Not available p—Preliminary
Source: FAA and Transport Canada

HAI Reported Accident Rate

	1981*	1982*	1983*	1984*
Reported Flying hours	2,022,412	1,614,224	1,110,562*	1,484,972
Reported Accidents	118	75	40	48
Reported Accident rate/ 100,000 hrs5.89	4.65	3.60	3.23	
Reported Fatal accidents	10	15	7	10

* Incomplete data

Now, You Can Continue to Work - and Earn a College Degree.

We understand your problem. You can not afford to leave your job to attend a college full-time. But now there is a solution.

Embry-Riddle Aeronautical University has developed an Independent Study Program offering the Bachelor of Professional Aeronautics degree and a Bachelor of Science Degree in Aviation Administration.

This is not a correspondence course program, but rather an independent study program designed to meet the higher educational needs of professionals in selected aeronautical fields. Your aviation formal training and professional experience are merged with academic study in the liberal arts, sciences and management.

Our program allows you the opportunity to earn an accredited college degree in your own home. The degree will assist you in advancing in your chosen field and give you the potential to earn a higher salary.

Your military and civilian training experience may have already earned you from 18 to 64 credit hours.

To find out what you have already earned, complete and return the coupon below, or call (904) 673-3180, extension 204/253.

Embry-Riddle
Aeronautical University

Embry-Riddle Aeronautical University adheres to the principle of equal education and employment opportunity without regard to race, handicap, sex, color, creed or national origin. This policy extends to all programs and activities involving or supported by the University.

Yes, I'd like more information about —
The Independent Study Program

Embry-Riddle Aeronautical University
Tom Pettit, Director
Center for Independent Studies
Box 540, Bunnell, FL 32010

HAI-A

Name ____________________
Address ____________________
City ____________ State ____________ Zip ____________
Social Security No. ____________ Phone ____________

We would like to invite you to invest in our past

and in our future.

Help us build a strong foundation by becoming a founding member of The Helicopter Foundation International.

The helicopter industry has been advancing at such a rapid pace over the years that we have almost lost sight of our exciting history ... the role of the "Unique Machine" in our society.

In 1983, the Helicopter Foundation International was created to become the caretaker of the helicopter industry's illustrious history.

To date, HFI has collected more than 900 historic helicopter models, 20,000 documents, rare books and other memorabilia documenting the history and growth of the helicopter industry. This extensive collection will serve as a research center for students and other enthusiasts. The collection will continue to expand as materials become available or as the exciting history of the helicopter unfolds.

HFI needs your support.

Help us ensure a strong future for your foundation, become an individual or corporate founding member. Your contribution is tax deductible*. Donations in the form of historic documents, models, periodicals and memorabilia are also greatly appreciated.

HAI Chairman Charles W. Johnson (left) accepts a model of the Boeing Vertol 360, and a picture of the Boeing Vertol H-16, Navy HUP and H-21 from Brian R. Woodcock (center) and Sy Berdux (right), of Boeing Vertol. Johnson accepted these gifts for the Helicopter Foundation International.

Helicopter Foundation International

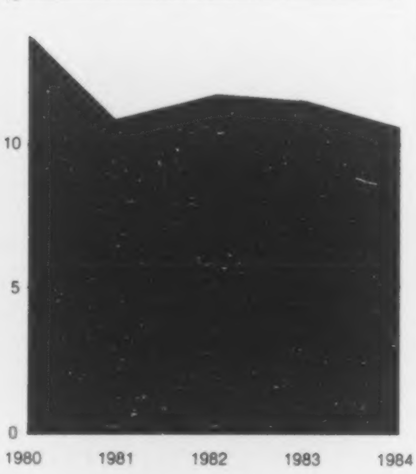
1619 Duke Street Alexandria, VA 22314-3406
Telephone 703-683-4646

For information return the postpaid reply card on page 144 or contact John Slattery, Curator

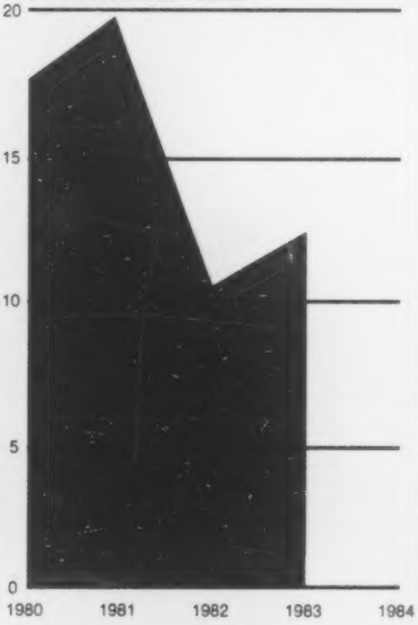
---

* HFI is recognized by the U.S. Internal Revenue Service as a 501(c)(3) non-profit, publicly funded, tax-exempt organization. Consult your tax advisor for applicability to your situation.

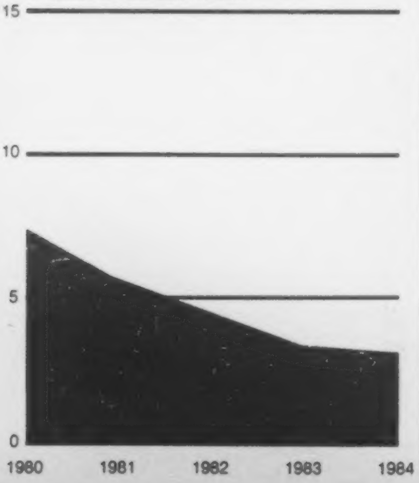
U.S. Helicopter Accident Rate Fatal Accident Rate



Canadian Helicopter Accident Rate Fatal Accident Rate



HAI Member Accident Rate Fatal Accident Rate



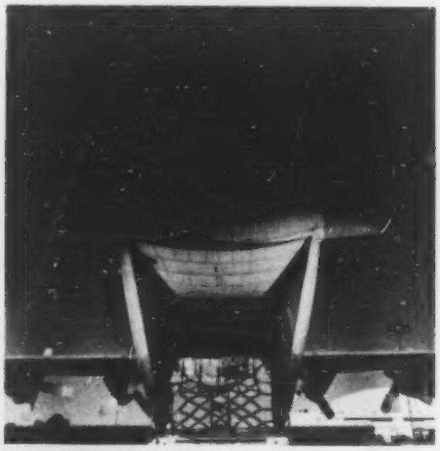
U.S. helicopter accidents, fatal accidents, fatalities and rates

Year	Accidents	Fatal accidents	Fatalities	Hours flown	Accident rate	Fatal rate
1970	264	22	32	866,828	30.46	2.54
1971	245	26	35	891,000	27.50	2.92
1972	245	36	66	1,043,900	23.47	3.45
1973	278	28	43	1,157,900	24.01	2.42
1974	285	47	72	1,431,600	19.91	3.28
1975*	266	18	30	97,400	27.31	1.85
1976	249	26	39	1,103,000	22.57	2.36
1977	247	22	28	117,000	21.11	1.88
1978	285	41	58	1,397,000	20.40	2.93
1979	267	35	58	1,522,000	17.54	2.30
1980	263	40	60	1,891,000	13.91	2.12
1981	257	30	55	2,303,000	11.16	1.30
1982	286	49	83	2,350,231	12.17	2.08
1983	254	35	59	2,271,377	11.18	1.54
1984	263	38	71	2,495,303	10.54	1.52

Source: FAA and NTSB

* — In 1980 the NTSB revised the accident rate retroactively to 1975 due to the FAA adjusting its reported flight hours. As a result, the NTSB rates prior to 1975 are not compatable with those 1975 and later.

Chopper Hopper



Hercules L-100
Boeing 707-320C
(Hushkitted)

Available For
Helicopter Movements
Charter Flights
Project Support
Contract Services

Worldwide
Operating Authority
Remote/Unimproved
Site Delivery
24 Hour Availability
Outsize/Unique
Cargo Capabilities
Drive On/Containerized
or Bulk Loading

SOUTHERN AIR TRANSPORT
Miami International Airport
800-327-6456 • 305-871-5171 • Telex: 51-8856 • SITA: MIAOOSJ

World civil helicopter records

The source of data is the Federation Aeronautique Internationale.

Class E-1 helicopters
Without payload

6/21/72
Altitude **12,442 m/40,820 ft**

Jean Boulet (France)
Alouette SA 315-001 Lama
Artouste IIIB 735 KW
Istres

3/26/66
Distance in a closed circuit **2,800.20 km/1,739.96 mi**

Jack Schweibold (USA)
Hughes YOH-6A No. 24213
1 Allison T-63-A-5
Edwards AFB, California

4/6-7/66
Distance in a straight line **3,561.55 km/2,213.04 mi**

Robert G. Ferry (USA)
Hughes YOH-6A No. 24213
1 Allison T-63-A-5
Culver City, California to
Ormond Beach, Florida

9/1-30/82
Speed around the world **56.97 kph/35.40 mph**

H. Ross Perot, Jr., pilot (USA)
J.W. Coburn, co-pilot
Bell 206L-II LongRanger
Allison 250-C28B, 435 hp
29 days, 3 hours, 8 minutes, 13 seconds

8/5/82-7/22/83
Around the world (solo) 56,765.38 km/35,258 mi

Dick Smith (Australia)
Bell JetRanger III
Allison 250-C-20 J,420shp

12/14/70
Speed over a 3 km course **348.971 kph/216.839 mph**

Byron Graham (USA)
Sikorsky S-67
2 GE T-58
Windsor Locks, Connecticut

Closed circuit

8/26/64
100 km speed **340.15 kph/211.35 mph**

Boris Galitsky (USSR)
Mil MI-6; 2 TB-2BM
Podmoscovnoe

2/8/82
500 km speed **345.74 kph/214.84 mph**

Thomas Doyle (USA)
Sikorsky S-76
2 Allison 250-C-30, 640 shp
West Palm Beach, Florida

Class E-1a, light helicopters
Less than 500 kgs/1,102 lbs

12/29/53
Altitude **4,789 m/15,712 ft**

Jean Dubos (France)
SNCASO Djinn 2
Turbomeca Palouste
Villacoublay

5/11/82
Distance in a closed circuit **260.494 km/161.863 mi**

Douglas P. Tomkins (Canada)
Robinson R-22
Lycoming 0-320, 124 hp
Sault Ste. Marie, Ontario

5/11/82
Distance in a straight line **263.615 km/163.803 mi**

Ivan D. Blackburn (Canada)
Robinson R-22
Lycoming 0-320, 124 hp
Patridge Point, Sudburg

5/11/82
Speed over a 3 km course **176 kph/109 mph**

Richard G. Kirkwood (Canada)
Robinson R-22
Lycoming 0-320, 124 hp
Sault Ste. Marie, Ontario

Closed circuit

5/12/82
100 km speed **170.817 kph/106.141 mph**

Gary J. Ertel (USA)
Robinson R-22
Lycoming 0-320, 124 hp
Sault Ste. Marie, Ontario

Class E-1b, light helicopters
500-1,000 kgs/1,102-2,204 lbs

6/21/72
Altitude **12,424 m/40,820 ft**

Jean Boulet (France)
Alouette SA 315-001 Lama
Artouste III B 735
Istres

3/21/66
Distance in a closed circuit **1,700.124 km/1,056.408 mi**

Jack L. Zimmerman (USA)
Hughes YOH-6A
1 Allison T-63-A-5
Edwards AFB, California

2/8/61
Distance in a straight line **1,176.79 km/731.15 mi**

A. P. Averill (USA)
Bell 47-G
Franklin 0-335
El Paso to Texarkana, Texas

3/24/66
Speed over a 3 km course **274.73 kph/170.70 mph**

Lt. Col. Richard T. Heard (USA)
Hughes YOH-6A
1 Allison T-63-A-5
Edwards AFB, California

Closed circuit

3/13/66
100 km speed **259.47 kph/161.22 mph**

Maj. A. L. Darling (USA)
Hughes YOH-6A
1 Allison T-63-A-5
Edwards AFB, California

3/13/66
500 km speed **254.59 kph/158.19 mph**

Maj. A. L. Darling (USA)
Hughes YOH-6A
1 Allison T-63-A-5
Edwards AFB, California

Class E-1c, light helicopters
1,000-1,750 kg/2,204-3,858 lbs

4/6-7/66
Altitude **10,856 m/35,617 ft**

Jean Boulet (France)
Alouette SA 351-001
Artouste III B 735 KW
Istres

3/26/66
Distance in a closed circuit **2,800.20 km/1,739.96 mi**

Jack Schweibold (USA)
Hughes YOH-6A
1 Allison T-63-A-5
Edwards AFB, California

4/6-7/66

Distance in a straight line **3,561.55 km/2,213.04 mi**

Robert G. Ferry (USA)
Hughes YOH-6A
1 Allison T-63-A-5
Culver City, California to Ormond Beach, Florida

5/13/71

Speed over a 3 km course **310 kph/192.6 mph**

Dennis Prost (France)
SA 341-01 Gazelle
Istres

Closed circuit

5/13/71

100 km speed **296 kph/183.9 mph**

Dennis Prost (France)
SA 341-01 Gazelle
Istres

3/12/66

500 km speed **249.84 kph/155.24 mph**

Col. David M. Kyle (USA)
Hughes YOH-6A
1 Allison T-63-A-5
Edwards AFB, California

Class E-1d, light helicopters

1,750-3000 kg/3,858-6,614 lbs

12/11/64

Altitude **10,713.7 m/35,150 ft**

Maj. E. F. Sampson (USA)
Bell UH-1D
1 Lycoming T-52-L-13
Fort Worth, Texas

4/17/68

Distance in a closed circuit **1,528.77 km/949.93 mi**

Alexay Annossov (USSR)
Mil M1-1; AL-26B

4/20/74

Distance in a straight line **1,714.837 km/1,065.55 mi**

Siegfried Hoffman (W. Germany)
Adam Teleki
BO 105-C, D-HABV
2 Allison 250-C-20, 640 shp
Ottobrun, W. Germany to
Hinojosa de Duque, Spain

2/6/82

Speed over a 3 km course **342.61 kph/212.90 mph**

Nicholas Lappos (USA)
Sikorsky S-76
West Palm Beach, Florida

Closed circuit

2/6/82

100 km speed **331.22 kph/205.82 mph**

David Wright (USA)
Sikorsky S-76
West Palm Beach, Florida

11/23/64

500 km speed **286.83 kph/178.22 mph**

Maj. Billy L. Odneal (USA)
Bell UH-1D
1 Lycoming T-53-L-13
Fort Worth, Texas

Class E-1e, light helicopters

3,000-4,500 kg/6,614-9,920 lbs

4/29/75

Altitude **9,071 m/29,760 ft**

Maj. Gen. M. Khosrowdad (Iran)
Bell Model 214A
1 Lycoming LTC4B-8D
Ahwaz

9/23/64

Distance in a closed circuit **2,000.146 km/1,242.83 mi**

CWO Joseph C. Watts (USA)
Bell UH-1D
1 Lycoming T-53-L-11
Edwards AFB, California

9/27/64

Distance in a straight line **2,170.70 km/1,348.81 mi**

Capt. Michael N. Antoniou (USA)
Bell UH-1D
1 Lycoming T-53-L-11
Edwards AFB, California to Rogers, Arizona

2/4/82

Speed over a 3 km course **340.48 kph/211.57 mph**

William Kramer (USA)
Sikorsky S-76
2 Allison 250-C-30, 650 shp
West Palm Beach, Florida

Closed circuit

2/6/82

100 km speed **334.688 kph/207.97 mph**

David Wright (USA)
Sikorsky S-76
2 Allison 250-C-30, 650 shp
West Palm Beach, Florida

2/8/82

500 km speed **345.74 kph/214.84 mph**

Thomas Doyle (USA)
Sikorsky S-76
2 Allison 250-C-30, 650 shp
West Palm Beach, Florida

Aviation Maintenance Publishers, Inc.

The world's largest producer of textbooks and audio-visual programs for Airframe and Powerplant technical instruction and certification

For sixteen years publishers of the *only* hands-on aviation maintenance magazine:

INTERNATIONAL Aviation Mechanics Journal

The magazine for the pros by the pros

Aviation Maintenance Publishers, Inc.
P.O. Box 36 • Riverton, WY 82501-0036

For book and a/v catalog, or magazine advertising and subscription rates call: **TOLL FREE** **1-800-443-9250**

Specialized aviation organizations

A listing of organizations, publications and individuals that affect aviation policy

Africa

Helicopter Association of Southern Africa
Box 18045, Rand Airport,
Germiston, Transvaal
South Africa 1419
☎ 011-827-2516 ☐ 426-485
Executive Director: Cor Z.A. Beek

Australia

General Aviation Association
Bankstown Airport, Sydney, N.S.W.
2200 Australia
☎ 02-709-2385/5721 ☐ 22247
Executive Director: B. E. Thompson

Canada

Air Transport Association of Canada
747 Metropolitan Life Building
99 Bank Street, Ottawa, Ontario,
Canada K1P 6B9
☎ 613-233-7727
Chairman, Helicopter Committee:
Lowell Ritchey
c/o Frontier Helicopter Ltd. Box 220
Abbotsford, B.C. V2S 4N9
☎ 604-853-5887 ☐ 04363529

France

Groupement Francais de L'Helicoptere
6 Rue Galilee, Paris Cedex 16,
France 75116
☎ 1-723-7252
President: Lionel Poilane

Germany

German Aerospace Industries Association
Bundesverband Deutsche Luftfahrt, Raumfahrt und
Austrustungs-industrie
Konstantinstrasse 90
D-5300 Bonn 2, West Germany
☎ 0228-330011 ☐ 0885-528

German Helicopter Association
Deutscher Hubschrauber
Verband e.V.
c/o Sabena
Rossmarkt 10, D-6000
Frankfurt/Main 1, West Germany
☎ 0611-295061 ☐ 0411467
President: Bernhard Liscutin

Helicopterzentrum e.V.
Box 1310, D-3062
Buekeburg, West Germany
☎ 05722-5533
Chairman: Gerhard Lange

New Zealand

Aviation Industry Association
Box 2045
Wellington 1
New Zealand
☎ 4-722-706
President: F. A. Brittain

United Kingdom

British Helicopter Advisory Board
Knowles House, Cromwell Road
Redhill, Surrey, England RH1 1LW
☎ 0737-62371
Chief Executive:
Capt. Eric M. Brown R.N. (Ret'd)

British Rotorcraft Museum Ltd.
The Airport, Weston-S-Mare
Avon, England BS248EL
☎ 0934-822524
Honorary Secretary: Minda L. ap Rees

General Aviation Manufacturers and Traders Association
26 High Street, Brill, Aylesbury
Buckinghamshire, England HP18 9ST
☎ 0844-238-389
Chief Executive: A.B.J. Forman, M.B.E.

United States

Aerospace Industries Association of America
1725 DeSales Street, N.W.
Washington, D.C. 20036
☎ 202-429-4600
President: Karl G. Harr
Director of Helicopter Activities:
Jean Ross Howard

Airborne Law Enforcement Association
c/o Phoenix Police Department
102 East Deer Valley Road
Phoenix, Arizona 85024
☎ 602-262-7427
President: Sgt. Tony Kruczynski

or

c/o Columbus Division of Police
681 West Third Avenue
Columbus, Ohio 43212
☎ 614-222-4656
Librarian: Lt. Paul Newell

Aircraft Owners and Pilots Association
421 Aviation Way
Frederick, Maryland 21701
☎ 301-428-9530
President: John L. Baker

Alaska Air Carriers Association Inc.
Pouch 6273
301 W. Northern Lights Blvd.
Suite 600
Anchorage, Alaska 99502
☎ 907-279-7684
Executive Director: Lance Wells

American Helicopter Society
217 N. Washington Street
Alexandria, Virginia 22314
☎ 703-684-6777
Executive Director: Col. John F. Zugschwert

Appalachian Helicopter Pilots Assn.
c/o United Coal Company
P.O. Box 1280
Bristol, Virginia 24203
☎ 703-466-3322
President: Charles (Bill) White

Eastern Region Helicopter Council
50 Park Place, Suite 1240
Newark, New Jersey 07102
☎ 914-238-3025
President: Matthew Zuccaro

Future Aviation Professionals of America
4291-J Memorial Drive
Decatur, Georgia 30032
☎ 404-294-0266
President: Louis Smith

Helicopter Association of Florida
c/o Crescent Airways
7501 Pembroke Road
Hollywood, Florida 33023
☎ 305-987-1900
President: Alan Harris
Vice President: William Evans

Helicopter Club (A division of the National Aeronautics Association)
821 15th Street, N.W., Suite 430
Washington, D.C. 20005
☎ 202-347-2808
President: Col. John F. Zugschwert

Helicopter Operators of Texas
P.O. Drawer 785
Porter, Texas 77365
☎ 713-354-5606

Helicopter Safety Advisory Conference
c/o Lynn Clough, Manager, Flight Operations
Tenneco, Inc.
1695 JFK Boulevard
Houston, Texas 77032
☎ 713-757-8100

Metroplex Helicopter Association
P.O. Box 11083
Arlington, Texas 76007
☎ 214-931-7006
President: Richard Gilson

Michigan Helicopter Association
2100 Fisher Building
Detroit, Michigan 48202
☎ 313-323-8339
President: Joel Alexander

National Aeronautics Association
821 15th Street, N.W., Suite 430
Washington, D.C. 20005
☎ 202-347-2808
President: Major General Clifton von Kann

National Agricultural Aviation Association
115 D Street, S.E., Suite 103
Washington, D.C. 20003
☎ 202-546-5722
Executive Director: Harold M. Collins

National Air Transportation Association
4226 King Street
Alexandria, Virginia 22302
☎ 703-845-9000
President: Lawrence L. Burian

National Association of State Aviation Officials
777 14th Street N.W., Suite 717
Washington, D.C. 20005
☎ 202-783-0588
Executive Vice President: Robert Warner

National Business Aircraft Association
One Farragut Square South
Washington, D.C. 20006
☎ 202-783-9000
President: John Winant

New England Helicopter Pilots Association
P.O. Box 88
Bedford, MA 01730
☎617-973-7350
President: Robert Girouard

Northwest Helicopter Association
22749 Main View Drive, S.
Apt. 6
Des Moines, Washington 98188
☎206-655-4031
President: Allen E. Scott

Professional Helicopter Pilots Association of California
c/o Los Angeles Police Department
Air Support Division
555 Ramirez Street
Los Angeles, California 90012
☎ 213-485-2121
President: Sgt. Rich Eyster

Western Helicopter Safety Advisory Council
P.O. Box 1337
Provo, Utah 84603
☎ 801-375-1124
Chairman: Jim Burr

International

European Helicopter Association
Knowles House
Cromwell Road, Redhill, Surrey
England RH1 1LW
☎ 91-62371
Secretary: Capt. Eric Brown, R.N. (Ret'd)

Helicopter Association International
1619 Duke Street
Alexandria, Virginia 22314
☎ 703-683-4646 □ 89-615
President: Frank L. Jensen, Jr.

International Civil Aviation Organization
1000 Sherbrooke St., W.
Montreal, PQ, Canada, H3A 2R2
☎ 514-285-8219 □ 0524513
President: Dr. Assad Kotaite

The Twirly Birds
P.O. Box 18029
Oxon Hill, Maryland 20745
☎ 301-567-4407
Secretary: John Slattery

The Whirly-Girls, Inc.
1725 DeSales Street, N.W., Suite 700
Washington, D.C. 20036
☎ 202-429-4648
Executive Director: Jean Ross Howard

European Helicopter Operators Committee
c/o Schreiner Airways, B.V.
Verbeekstraat 10-12
Leiden, 2332 CA, Netherlands
☎ 071-319319 □30506
Chairman: H.S. Jonker
Vice Chairman: G.F. Blower

1986 MEDIA KIT available on request

HELICOPTER

THE INDUSTRY'S LEADING COMMERCIAL & DEFENCE NEWS JOURNAL

- The *original* international helicopter news magazine — now in its 10th year of publication.
- Exclusive commercial and military coverage — with regional reports from local correspondents worldwide.
- Produced by helicopter professionals for helicopter professionals — giving quality editorial and unmatched credibility.
- Airmailed direct to every commercial and military operator in 162 countries — plus other international industry and key aviation subscribers.
- Special distribution at all major events in the helicopter calendar.
- The most cost-effective advertising in the helicopter market — less than half the price of other journals.

For information on advertising contact Linda L. Cook or Alice Percy at the address below.
Airmailed Subscription Rate:
$25.00 p.a. (£8.50 Europe). Payable by VISA/MASTERCARD with full name/address/position details. Published bi-monthly. Not available on a free circulation basis.

HELICOPTER International

75 Elm Tree Road, Locking, Weston-super-Mare, Avon,
England BS24 8EL
Telephone: 0934-822524. Telex: 44220 COMTEL G

UNDERSTANDING HELICOPTERS

Helicopter capabilities have grown to the point where every flight department manager must appreciate the benefit of this unique aircraft.

Straight Up: How It Developed

How First Timers Learn to Use Their Helicopters

Icing: The Final Barrier

B/CA HELI

HELICOPTER

Scheduling the Corporate Helicopter

Flight Training: The Subtle Evolution

HELICOPTER

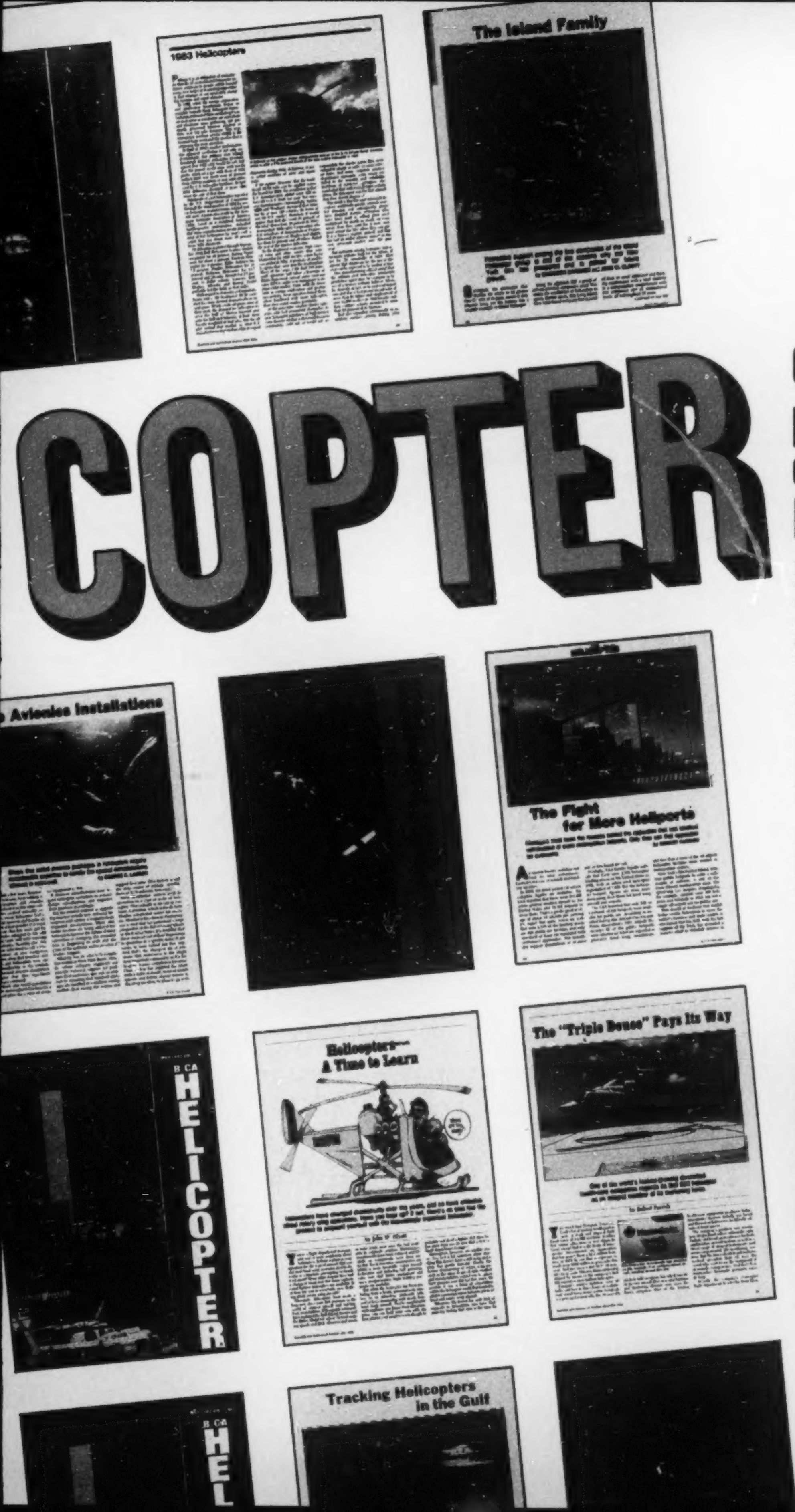
EMS: The Next Boom?

Cross Utilization: Has Its Time Come?

A Good Idea Made Better

Scheduling the Corporate Helicopter

Inside Avionics Installations


1983 Helicopters
The Island Family
COPTER
Avionics Installations
The Fight for More Heliports
B/CA HELICOPTER
Helicopters— A Time to Learn
The "Triple Deuce" Pays Its Way
Tracking Helicopters in the Gulf
B/CA HEL

Only one publication offers you editorial like this.

B/CA HELICOPTER, the special "magazine-within-a-magazine" that's been with you every step of the way. Answering your need for more and more information about management, hardware and piloting technique.

Providing you with greater and greater coverage of helicopter operators' three Ms: Money, Marketing and Manpower.

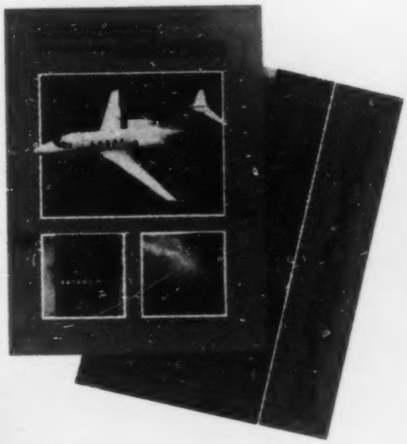
Bound into every other issue of Business and Commercial Aviation, B/CA HELICOPTER offers you exclusive features that can't be found anywhere else in the industry.

So be sure to read B/CA HELICOPTER, the "magazine-within-a-magazine" that gives you all the insights into the world of helicopters you could possibly want. And conceivably need.

B/CA

HELICOPTER

Incomparable



INTERAVIA
aerospace review

WE KNOW, FLY AND REPORT
ON HELICOPTERS

...as well as on the whole aerospace scene world-wide. In four languages (English, French, Spanish and German) and from a neutral, objective base, we can talk directly to the world's operators and decision-makers. The world's most INTERNATIONAL aerospace journal gives you the facts and factors to help you make up your mind.

A special annual Interavia helicopter supplement, published in January and provided free to Interavia Aerospace Review readers, highlights the main technical and operational issues.

Also, Interavia Data, a specialised department of the Interavia Publishing Group, produces an up-to-date, in-depth survey of the world's helicopters and their systems, and of the military helicopter fleets.

Subscriptions USA

Publications Expediting Inc., 200 Meacham Avenue, Elmont, L.I., N.Y. 11003

Advertisement USA

Western Region

William M.C. Miller, Interavia Publications, 4201 Wilshire Bvd, Suite 406
Los Angeles, CA90010, Tel (213) 933 4600, Telex 279748 ITAV UR

Central Region

Sheena Robbins, Interavia Publications, 10801 Main Street, Suite 600, Fairfax, Virginia 22030, Tel (703) 352 2331, Telex 285879 ITAV UR

Eastern Region

C.E. Soden, Susan E. Franz, Interavia Publications, Suite 309, 7 High Street, Huntington, NY 11743, Tel (516) 423 1330, Telex 230199 SWIFT UR (international) 960127 domestic

INTERAVIA PUBLISHING GROUP

86, av. Louis Casaï 1216 Cointrin/Geneva
Switzerland

Key publications in the world of helicopter operations

Aerial Applicator
Drawer 2887
Santa Fe Springs, California 90670
☎ 213-692-6373
Editor: Robert G. Rosenblatt

Aerospace Facts and Figures
Aerospace Industries Association
of America, Inc.
1725 DeSales Street, N.W.
Washington, D.C. 20036
☎ 202-429-4600
Director, Research Center: Virginia C. Lopez

AEROKURIER
Official Publication of the German Helicopter Association
The German International Aviation Magazine
Godesberger Allee 70
D-5300 Bonn-Bad Bodesburg
West Germany
☎ 011-49-209-37431 ☐ 824727
Editor: Rolf Dorpinghaus

Aviation International News
P.O. Box 277
21 Cross Avenue
Midland Park, New Jersey 07432
☎ 201-444-5075
Editor: Jim Holahan

Aviation Daily
1156 15th Street, N.W.
Washington, D.C. 20005
☎ 202-822-4600
Editor: James E. Skinner

Aviation Week & Space Technology
1221 Avenue of the Americas
New York, New York 10020
☎ 212-512-2528
Editor: William Gregory

Business and Commercial Aviation
Hangar C-1, Westchester County Airport
White Plains, New York 10604
☎ 914-948-1912
Editor: John W. Olcott

Business Aviation
1156 15th Street, N.W.
Washington, D.C. 20005
☎ 202-822-4600
Editor: David Collogan

Canadian Aviation
777 Bay Street
McClean Hunter Bldg. North, 5th floor
Toronto, ON, M5W 1A7, Canada
☎ 416-596-5789
Editor: Hugh Whittington

Commuter Air
6255 Barfield Road
Atlanta, Georgia 30328
☎ 404-256-9800
Editor: David Massey

Commuter Regional Airline News
1925 North Lynn Street
Suite 304
Arlington, Virginia 22209
☎ 703-522-2354
Editor: Kathryn B. Creedy

Flight International
Business Press International Ltd.
Quadrant House, The Quadrant
Sutton, Surrey SM2 5AS
England
☎ 01-661-3500 ☐ 892084 BISPRS G
Editor: David Mason

Flying
One Park Avenue
New York, New York 10016
☎ 212-503-4200
Editor: Richard L. Collins

The Helicopter Annual
Helicopter Association International
1619 Duke Street
Alexandria, Virginia 22314-3406
☎ 703-683-4646 ☐ 89-615
Publisher: Frank L. Jensen, Jr.

Helicopters in Canada
Corvus Publishing Group
1224 53rd Avenue, N.E., Suite 158
International Airport
Calgary, Alberta T2E-7E2
Canada
☎ 403-275-9457
Publisher: Paul Skinner

Helicopter International
75 Elm Tree Road
Locking, Weston-S-Mare
Avon, England BS24 8EL
☎ 0934-822524 ☐ 44220
Director: Elfan ap Rees

Helicopter News
6917 Arlington Road
Suite 303
Bethesda, Maryland 20814
☎ 301-986-9202
Editor: Frank G. McGuire

Helicopter World
111 High Street
Burnham, Bucks SL1 7JZ,
England
☎ (06286)4311 ☐ 846575
Editor: Paul Beaver

Helidata
75 Elm Tree Road
Locking, Weston-S-Mare
Avon, England BS24 8EL
☎ 0934-822524 ☐ 44220
Editor: Elfan ap Rees

Interavia
86 Avenue Louis-Casai
P.O. Box 162
CH-1216 Cointrin, Geneva
Switzerland
☎ 022-98-05-05 ☐ 22 122
Editor-in-Chief: Pierre Condom

Jane's All the World's Aircraft
Jane's Publishing Co. Ltd.
238 City Road
London, England EC1V 2PU
☎ 01-251-9281 ☐ 894689 JANES G
Editor: John W. R. Taylor

The Official Helicopter Blue Book
5225 Old Orchard Road, Suite 40
Skokie, Illinois 60077
☎ 312-965-5755 ☐ 720 493
Editor: Barry D. Desfor

Professional Pilot
West Building, Washington National Airport
Washington, D.C. 20001
☎ 703-684-8270
Editor: Murray Q. Smith

Revista Aerea
310 E. 44th St.
Suite 1601
New York, New York 10017
☎ 212-370-1740
Editor: Elaine Asch

Rotor & Wing International
News Plaza, P.O. Box 1790
Peoria, Illinois 61656
☎ 309-682-6626
Editor: Don Toler

ROTORnews
Helicopter Association International
1619 Duke Street
Alexandria, Virginia 22314-3406
☎ 703-683-4646 ☐ 89-615
Editor: Daniel P. Warsley

Vertiflite
217 N. Washington Street
Alexandria, Virginia 22314
☎ 703-684-6777
Editor: Walter Bacak

Vertica
Maxwell House
Fairview Park
Elmsford, New York 10523
☎ 914-592-7700
Editor: P. Friedman

Western Flyer
P.O. Box 98786
Tacoma, Washington 98498-0786
☎ 206-588-1743
Editor: Bruce Williams

World Aviation Directory
1156 15th Street, N.W.
Washington, D.C. 20005
☎ 202-822-4600
Managing Editor: Linda Falls

World Helicopter Forecase
P.O. Box 4585
100 Northfield Street
Greenwich, CT 06830
☎ 203-661-7800 ☐ 131526

Civil aviation officials worldwide

The civil aviation officials throughout this section are listed alphabetically by country.

Afghanistan
A. Watt
Civil Aviation Authority & Tourism
P.O. Box 165
Kabul, Afghanistan

Algeria
C. Belleili
Director General of Civil Aviation
Ministere des Transports
119, Rue DiDouche
Memorial
Algiers,
Algeria

Angola
V. de Mira Godinho
Director of National Civil Aviation
Caixa Postal 569
Luanda, Angola

Argentina
Av. Comodoro Pedro Zanni N 250
Department of Air Transportation
Officina 182 (Verde)
Buenos Aires 1104
Argentina

Australia
C. W. Freeland
Secretary of Department of Aviation
G.P.O. Box 367
Canberra, ACT
2601
Australia

Austria
Dipl. Ing. J. Rausch
President of Federal Office of Civil Aviation
Schnirchgasse 11
A — 1030 Vienna
Austria

Bahamas
D. A. F. Ingraham
Director of Civil Aviation Department
P.O. Box N-975
Nassau, Bahamas

Bahrain
Shaikh Hamad Abdallah Al-Khalifa
Director General of Civil Aviation Department
Ministry of Development & Industry
P.O. Box 586
Manama, Bahrain

Bangladesh
Civil Aviation Authority
Headquarters Office
Kurmitola
Dhaka 6, Bangladesh

Barbados
Russell W. Kellman
Permanent Secretary of
Ministry of International Transport
Grantley Adams Airport
Christ Church, Barbados

Belgium
W. Vanderperren
Director General of Administration
de l'Aeronautique
Centre Communication Nord
B-1000 Brussels, Belgium

Belize
Luigi Zaldivar
Chief Civil Aviation Officer
Belize International Airport
P.O. Box 367
Belize City
Belize

Benin
M. Girigissou Gado
Minister, Ministry of Equipment & Transport
B. P. 372
Cotonou, Benin

Bermuda
J. R. Pitman
Director of Civil Aviation Department
Bermuda Air Terminal
Ferry Reach, Bermuda

Bolivia
Gen. Rene Guzman Fortun
Director General of Civil Aeronautics
P.O. Box 7080
Camacho
La Paz, Bolivia

Botswana
J. H. Reynolds
Director of Civil Aviation Department
P.O. Box 250
Gaborone, Botswana

Brazil
Lt. Brig. D. J. de Mattos
Minister — Aeronautics
Av. Marachal Camara, 233
110 Andar
Rio de Janeiro, Brazil

Brunei
Department of Civil Aviation
Brunei International Airport
Bandar Seri Begawan
Brunei

Bulgaria
Vasil Tsanov
Minister of Transportation
11 Rue Levski
Sofia, Bulgaria

Burkina Faso
Omar Diawara
Minister, Ministry of Transport
B. P. 363
Ouagadougou, Burkina Faso

Burma
J. Cardozo
Director of Air Traffic Services
No. 104, Strand Road
Rangoon, Burma

Burundi
Directorate of Aeronautics
B. P. 694
Bujumbura, Burundi

Cameroon
Benjamin Itce
Ministere des Transports, Box 173
Yaounde, Cameroon

Canada
Gordon M. Sinclair
Administrator of Canadian Air Transportation
Administration
Transport Canada
Bldg., 12th Floor
Ottawa, Ontario, Canada K1A ON8

Cape Verde
Director General of Civil Aviation Department
Amilcar Cabral Airport
Sal Island, Cape Verde

Central African Republic
Etienne Guekoli
Directeur General L' Aviation Civile et de la Meteorologie
B. P. 941
Bangui, Central African Republic

Chad
Director of Civil Aeronautics
B. P. 96
N' Djamena, Chad

Chile
Gen.Sergio Pineiro Correa
Director of General Aviation Civil
Aeronautics Department
Alameda Bernardo
O'Higgins N 1170, 10 Piso, Casilla 1152
Santiago, Chile

China
Hu Yizhou
Director General
General Administration of Civil Aviation of China
P.O. Box 644
Beijing, China

Colombia
G. G. Echeverri
Director de Departamento Administrativo de
Aeronautica Civil
Aeropuerto Internacional Eldorado
Bogota, Colombia

Comoros
Charles Pech
Director of Civil Aviation Department
Boite Postale No. 72
Moroni, Comoros

Congo
Hilaire Mounthalt
Minister for Civil Aviation
B. P. 128
Brazzaville, Congo

Costa Rica
Capt. R. DeBenefictis M.
Director Aeronautics Administration
Apartado Postal 5026
San Jose, Costa Rica

Cuba
Guillermo Frias
Minister of Ministry of Transportation
Calle 23 No. 64, Vedado
Plaza de la Revolucion
Havana, Cuba

Cyprus
M. Herodotou
Director of Civil Aviation Department
Government House No. 25
St. George's Hill
Nicosia, Cyprus

Czechoslovakia
Ing. Jiri Nulicek
Director of Civil Aviation Administration
Na Prikope 33
110 05 Praha 1
Czechoslovak Socialist Republic

Denmark
V. K. H. Eggers
Director General of Civil Aviation Department
Codanhus, 60,
Gammel Kongevej
DK-1850 Frederiksberg C, Denmark

Djibouti
Moussa Robleh
Minister of Transport
B. P. 121
Djibouti, Djibouti

Dominican Republic
Col. Piloto Rafael Antonio Reyes Jorge
Director General of Civil Aeronautics
Edificio Manuel Fernandez Marmol
Avenida 27 de Febrero
Apartado Postal 1180
Santo Domingo, R.D.
Dominican Republic

Ecuador
Brig. General Raul Lopez Balarezo
Director General of Civil Aviation Department
Box 2077
Quito, Ecuador

Egypt
Dr. K. El. Hussainy
Vice Minister of Civil Aviation
Cairo Int'l Airport
Cairo, Egypt

El Salvador
Director General of Civil Aeronautics Department
Aeropuerto Internacional
Ilopango
San Salvador, El Salvador

Equatorial Guinea
Don Pablo Mba Nsang
Constantino Ochaga Nve
Minister of Transport
Ministerio Obras Publicas, Vivienda
y Transportes
Malabo, Equatorial Guinea

Ethiopia
Lulseged Filfilu
Head of Civil Aviation Authority
P.O. Box 978
Addis Ababa, Ethiopia

Fiji
V. Gonelevu
Chairman of Civil Aviation Authority of Fiji
Private Bag
Nadi Airport
Fiji

Finland
Carl-Eric Calas
Director General of National Board of Aviation
Box 50
SF-01531 Vantaa, Finland

France
Daniel Tenenbaum
Director General of Civil Aviation Department
93, Boulevard du Montparnasse
F-75270 Paris, France

Gabon
Joseph Etoughe
Secretary General of Civil Aviation Department
Box 546
Libreville, Gabon

Gambia
Alieu B. O. Mbye
Director of Civil Aviation Department
Private Bag
Yundum International Airport
Yundum, Gambia

Ghana
Wg. Cdr. D.T. Osabu-Kle
Director of Civil Aviation Department
P.O. Box 87
Kotoka Airport
Accra, Ghana

Greece
E. Deros
Governor of Civil Aviation Authority
Ministry of Communications
Box CAA
Athinal Airport P.O.
Athens, Greece

Guatemala
Col. O. R. Alvarez
Director General of Civil Aeronautics Department
Aeropuerto Internacional La Aurora
Guatemala City
Guatemala

Guinea
Director General of Civil Aviation Department
Ministere des Transports
Box 95
Conakry, Guinea

Guinea Bissau
Director General of Civil Aviation Department
C.P. 77
Bissau, Guinea Bissau

Guyana
Seeram Prashad
Civil Aviation Department
Ministry of Transport
Wights Lane
Kingston,
Georgetown, Guyana

Haiti
Directeur General de Office National
De l'Aviation Civile
Aeroport International Francois Duvalier
Boite Postal 1346
Port-au-Prince, Haiti

Honduras
Capt. Jorge V. Fley
Chief of Operations of Civil Aeronautics Department
Aeropuerto International Toncontin
Tegucigalpa, Honduras

Hong Kong
J. T. Thorpe, J. P.
Director of Civil Aviation Department
United Centre, 10th Floor
95 Queensway, Hong Kong

Hungary
Endre Farkas
Director General of Civil Aviation Department
Box 87
1400 Budapest
Hungary

Iceland
Petur Einarsson
Director General of Civil Aviation Department
Reykjavik Airport
101 Reykjavik, Iceland

India
Air Marshal C. K. S. Raje
Director General of Civil Aviation Department
Block II East
Ramakrishna Puram
New Delhi-110066, India

Indonesia
Air Vice Marshal Sutoyo
Director General of Air Communications
Jalan Angkasa I/1, #2
Jakarta, Indonesia

Iran
S. H. Sharafi
Chief Administrator of Civil Aviation Organization
International Affairs and Air Transport
P.O. Box 11365-8315
Mehrabad Airport
Tehran, Iran

Iraq
President of State Organization for Iraqi Civil Aviation
P.O. Box 6179
Al-Mansour
Baghdad, Iraq

Ireland
James Mitchell
Minister of Civil Aviation Division
Department of Communications
Kildare Street
Dublin, Ireland

Israel
S. Shohamy
Director of Civil Aviation Administration
Ben Gurion International Airport 70 100 LOD
Israel

Italy
Gen. Paolo Moci
Director General of Civil Aviation Department
Piazzale degli Archivi di Stato
00144 Roma/Eur, Italy

Ivory Coast
Mr. Savane
Director General of Civil Aviation Department
24 D, Botreau Roussel
B. P. V. 56
Abidjan, Ivory Coast

Jamaica
Keith Fraser
Director of Civil Aviation Department
9, Trinidad Terrace
Kingston 5, Jamaica

Japan
Kazoharu Matsui
Director General of Civil Aviation Bureau
1-3 Kasumigaseki, 2-Chome
Tokyo 100, Japan

Jordan
Maj. Gen. Khaled Ali
Director General of Civil Aviation Department
P.O. Box 7547
Amman, Jordan

Kenya
J. N. Kahuki
Director of Civil Aviation Department
P.O. Box 30163
Nairobi, Kenya

Korea, Democratic People's Republic of
Kim Yo Ung
Director General of Civil Aviation
Civil Aviation Administration
Sunan District
Pyongyang
Korea, Democratic People's Republic of

Korea, Republic of
Yi, Hui Song
Ministry of Transportation
Seoul,
Korea, Republic of

Kuwait
Jaber Al-Athby Al Sabah
Director General of Civil Aviation Department
P.O. Box 17
Safat, Kuwait

Laos
Director of Civil Aviation Department
8 Manthathourath St.
Box 119
Vientiane, Laos

Lesotho
C. T. Ohomane
Airport Admini. Officer
P.O. Box 629
Maseru, Lesotho

Liberia
McLeod Eleanor Darpoh
Minister of Transportation
Monrovia, Liberia

Libya
Marie Mohammed Abu Zakuk
Director General of Civil Aviation Department
General Administration
Tripoli, Libya

Luxembourg
Carlo Mathias
Director of Civil Aviation Department
Ministere des Transports
Service Aeronautique
19-21, Boulevard Royal Luxembourg City
Luxembourg

Madagascar
B. Rakoto-Rpzafindrazato
Inspector Aeronautics
Ministere des Transports, Director de L'Aviation Civile
B. P. 921
Antananarivo, Madagascar

Malawi
S. H. Pad Am Bo
Chief Civil Aviation Officer
Department of Civil Aviation
Private Bag 322
Capital City
Lilongwe 3, Malawi

Malaysia
Dr. Abdul Kuddus bin Ahmad
Director General of Civil Aviation Department
Terminal 2
Subang-Kuala Lumpur Int'l Airport
Selangor, Malaysia

Mali
Moussa Alassane Toure
Director of Civil Aviation Department
Ministre des Transports et des Travaux Publics
B. P. 227
Bamako, Mali

Malta
S. V. Fenech
Director of Civil Aviation Department
Civil Airport Building
Luqa, Malta

Mauritania
Capt. M. L. N'Diayane
Minister
Ministere de L' Equipment et des Transp.
Boite Postale 91
Nouakchott, Mauritania

Mauritius
P. Soobarah
Director of Civil Aviation Department
Plaisance Airport
Plaine Magnien, Mauritius

Mexico
Ing. Daniel Diaz
Secretaria de Communicaciones y Transportes
Bulevar Xola y Avenida de la Universidad
Mexico 12, D. F. Mexico

Morocco
A. Daoudi
Directorate of Civil Aviation
Ca Sier Officiel
Rabat — Chellah, Morocco

Mozambique
Nelson Barreto
Director of Civil Aviation Department
P.O. Box 227
Maputo, Mozambique

Nepal
T. M. S. Dongol
Supervisor of Civil Aviation Department
Babar Mahal
Kathmandu, Nepal

Netherlands
H. Raben
Director General of Civil Aviation Department
Koninginnegracht 19-21
P.O. Box 20903
2500 EX The Hague, Netherlands

Netherlands Antilles
Dr. C. E. Cathalina
Director of Civil Aviation
Civil Aviation Department
Seru Mahuma z/n
Curacao, Netherlands Antilles

New Caledonia
J. L. Duteis
Director of Civil Aviation Admini.
Box H1
Noumea Cedex
New Caledonia

New Zealand
Air Commodore Stuart McIntyre
Director of Civil Aviation Division
Ministry of Transport
Private Bag
Wellington, New Zealand

Nicaragua
Samuel A. Granera
Director General of Civil Aeronautics Department
Ministerio de Transporte
Apartado Postal 4936
Managua, Nicaragua

Niger
Amadou Nouhou
Directeur de Civil Aviation Department
Ministere du Commerce et des Transports
B. P. 727
Niamey, Niger

Nigeria
Commodore Patrick Koshon I
Minister of Transport
P. M. B. 12744
Lagos, Nigeria

Norway
E. Willoch
Director General of Civil Aviation Administration
P.O. Box 8124 Dep.
N-0032 Oslo 1, Norway

Pakistan
Air Marshal Khursheed Anwar Mirza
Director General of Civil Aviation Authority
19 Liaquat Barracks
Karachi 4, Pakistan

Panama
Roberto G. Revilla
Director General of Civil Aviation Department
Edificio de Diego Apt Do. 7401 y 7615
y Calle 49-98
Panama City 5, Panama

Papua New Guinea
Matthew Bendumb
Minister of Civil Aviation
Department of Transport and Civil Aviation
Post Office Box 851
Papua, New Guinea

Paraguay
Director General of Civil Aviation Department
Ministerio de Defensa Nacional 2 Pisco
Avenida Mariscal Lopez y Vice-Presidente Sanchez
Asuncion, Paraguay

Peru
F. A. Pinazo
Director General of Air Transport
Ministerio de Transportes y Comunicacion
Esq. Avda. 28 de Julio, esq.
Avda. Garcilazo de la Vega
Lima, Peru

Philippines
Brig. General Jesus Z. Singson (Ret.)
Director of Bureau of Air Transportation
Manila International Airport
Pasay City D-732, Philippines

Poland
Janusz Kaminski
Ministry of Transport
ul. Chalubinskiego 4/6
Warsaw 67, Poland

Portugal
Fernando A. de Melo Antunes
Director General of Civil Aviation Department
Avenida da Liberdade, 193
1298 Lisbon CODEX, Portugal

Qatar
Omran Essa Al-Kawari
Director of Civil Aviation Department
P.O. Box 3000
Doha, Qatar

Romania
D. N. Puiu
Chief of Civil Aviation Department
Bdul Dinicu Golescu 36-38
Bucharest, Sectorul 1
Romania

Rwanda
Dennis Amri
Director of Civil Aeronautics Department
Boite Postale 720
Kigali, Rwanda

Saudi Arabia
H. E. Sheikh Nasir al-Assaf
President of Civil Aviation Organization
P.O. Box 887
21442 Jeddah, Saudi Arabia

Senegal
Directeur de Civil Aviation Department
B. P. 8184
Aeroport de Dakar/Yoff, Senegal

Seychelles
M. J-L. Loustau-Lalanne
Directorate of Civil Aviation
President's Office
Department of Finance and Industry
P.O. Box 181
Victoria
Mahe, Seychelles

Sierra Leone
S. D. M. Hanciles
Director of Civil Aviation Department
Ministry of Transport and Communications
Ministerial Office Block
George Street (Central)
Freetown, Sierra Leone

Singapore
Lim Hock San
Director of Civil Aviation Department
Singapore Changi Airport
P.O. Box 1
Singapore 9181

Somalia
Jama Gas Maawiye
Minister — Transportation
P.O. Box 310
Mogadishu, Somalia

South Africa
J. J. S. Germishuys
Commissioner for Civil Aviation
Directorate of Civil Aviation
Private Bag X193
Pretoria 0001, South Africa

Spain
D. Pedro T. Lopez
Director General of Civil Aviation Department
Avenida de America 25
25 Madrid, Spain

Sri Lanka
H. B. Widerkoon
Director of Civil Aviation Department
Lotus Road
Columbo 1, Sri Lanka

St. Lucia
John Velox
Director Civil Aviation of the
Eastern Caribbean States
P.O. Box 1130
St. John's, St. Lucia

Sudan
Mohd El Jack
Director General of Civil Aviation Department
P.O. Box 430
Khartoum, Sudan

Surinam
Dr. R. M. Sallons
Director of Civil Aviation Department
P.O. Box 1981
Paramaribo, Suriname

Swaziland
Director of Civil Aviation Branch
Ministry Works
P.O. Box 58
Mbabane, Swaziland

Sweden
Bengt A. W. Johansson
Director General of Board of Civil Aviation
S-601 79 Norrkoping, Sweden

Switzerland
E. H. Egli
Director of Department of Civil Aviation
Zurich Airport
CH-8058 Zurich, Switzerland

Syria
Abdullah Al-Moughrabi
Director General of Civil Aviation Department
1 Sahet El-Najmeh
Damascus, Syria

Taiwan
Lt. Gen. T. M. Liv
Director General of Civil Aeronautics Admin.
Ministry of Communications
Taipei Sungshan Airport
105 Taipei
Taiwan, Republic of China

Tanzania
L. Mollel
Director General of Civil Aviation-Department
P.O. Box 2819
Dar-es-Salaam, Tanzania

Thailand
Dr. Chitti Wacharasindhu
Director General of Department of Aviation
Ngarmdu-Plee
Tung Mahamek
Bangkok 10120, Thailand

Togo
Pali Yao Tchalla
Director of Civil Aviation Department
B. P. 383
Lome, Togo

Tonga
J. A. Ellison
Director of Department of Civil Aviation
Private Bag
Nuku 'Alafa, Tonga

Trinidad & Tobago
G. Seignoret
Director of Civil Aviation Department
P.O. Box 552
Port of Spain
Trinidad & Tobago

Tunisia
Moncef Ayadi
Director of Civil Aviation Department
Ministere des Transports et des Commun
1, Rue d' Athenes
Tunis, Tunisia

Turkey
Ismet Erustun
Director General of Civil Aviation Department
Ministry of Communications
Ankara, Turkey

Uganda
Director General of Civil Aviation Department
P.O. Box 7270
Kampala, Uganda

Union of Soviet Socialist Republic
B. Bugayev
Minister
Ministry of Civil Aviation
Leningradsky Prospekt, 37
Moscow A-167
Union of Soviet Socialist Republic

United Kingdom
John Dent CBE
Chairman of Civil Aviation Authority
CAA House
45/59 Kingsway
London WC2B 6TE, United Kingdom

United States

Department of Transportation
400 Seventh Street, S.W.
Washington, D.C. 20590
☎202-426-4000 (Information)

	Direct phone	Mail code
The Secretary, Department of Transportation: Elizabeth Hanford Dole	426-1111	S-1
Assistant General Counsel, Aviation Enforcement & Proceedings: Kenneth Catlan (Acting)	426-7631	C-70
Director, Office of Aviation Operations: Paul L. Gretch	472-5434	P-40
Director, Office of Int'l Relations: Thomas Colwell	426-2907	P-50
Office of Essential Air Service: John V. Coleman	426-7631	S-60

Federal Aviation Administration (FAA)
National Headquarters
800 Independence Avenue, S.W.
Washington, D.C. 20591
Area code: 202

	Direct phone	Mail code
Administrator: Donald D. Engen	426-3111	AOA-1
Department Administrator: Richard Jones	426-8111	ADA-1
Chief Counsel, Office of Chief Counsel: E. Tazewell Ellett	426-3773	AGC-1
Assistant Chief Counsel, Regulations and Enforcement Division: John H. Cassidy	426-3073	AGC-200
Rules Docket: Michael Pripplet	426-3644	AGC-204
Assistant Chief Counsel, Litigation Division: James Dillman	426-3661	AGC-400
Assistant Chief Counsel, Procurement Policy Branch: Theron A. Gray	426-3480	AGC-500
Assistant Administrator, Office of Public Affairs: Steven Hayes	426-3883	APA-1
Director, Special Programs and Aviation Education: Don H. Clausen	426-3883	APA-6
Manager, Public & Audio Visuals Division (Acting): Gerald Lavey	426-3894	APA-100
Manager, National Airspace Review Enhancement Program Staff (NARE): Burton L. Gifford	755-5623	AMS-4
Associate Admin. for Development and Logistics: A.P. Albrecht	426-8181	ADL-1
Director of Program, Engineering and Maintenance Service: Martin T. Pozesky	426-3200	APM-1
Manager, Navigation and Landing Division: Alvin Thomas	426-3595	APM-400
Manager, Aircraft Safety and Airport Technology Division: Thomas O'Brien	426-8446	APM-700
Helicopter Program: Norman T. Fujisaki	426-3593	APM-710
Associate Admin. for Policy & Int'l Aviation: Donald R. Segner	426-3030	API-1
Director, Office of Environment & Energy: John E. Wesler	426-8406	AEE-1
Manager, Noise Abatement Division: James E. Densmore	755-9468	AEE-100
Director, Office of Int'l Aviation: Thomas P. Messier	426-3213	AIA-1
Manager, International Planning and Analysis Division: Steve Zaidman	426-3230	AIA-100
Manager, International Assistance Division: Steven Rothschild	426-3173	AIA-200
Director, Office of Aviation Policy & Plans: Norman Weil (Acting)	426-3331	APO-1
Manager, Noise Abatement Division: James E. Densmore	755-9468	AEE-100
Manager, Noise Policy and Regulatory Branch: Richard Tedrick	755-9027	AEE-110
Manager, Noise Technology Branch: Edmund W. Sellman	426-3396	AEE-120
Associate Admin. for Airports: Robert L. Donahue	755-9471	ARP-1
Deputy Associate Admin., Associate Administrator for Airports: Quentin D. Taylor	755-9471	ARP-2
Director, Office of Airport Planning and Programming: Paul L. Galis	426-3050	APP-1
Manager, Nat'l Planning Division: James V.Mottley	426-3451	APP-400
Manager, Grants-in-Aid Division: Lowell H. Johnson	426-3831	APP-500
Director, Office of Airport Standards: Leonard E. Mudd	426-3053	AAS-1
Manager, Design & Oprs. Criteria Division: James W. Bushee	426-3446	AAS-100
Associate Admin. for Air Traffic: Walter S. Luffsey	426-3666	AAT-1
Director, Air Traffic Plans and Requirements Service: Edward T. Harris (Acting)	426-3136	ATR-1
Manager, System Plans and Programs Division: Lane Speck	755-2245	ATR-100
Director, Air Traffic Operations Service: John R. Ryan	755-2182	ATO-1
Manager, Airspace Rules and Aeronautical Information Division: Daniel Paterson	426-3731	ATO-200
Manager, Flight Information and Obstructions Branch: S. Wugalter	426-3758	ATO-210
Manager, Airspace and Air Traffic Rules Branch: John Watterson	426-8783	ATO-230
Manager, Airspace and Aeronautical Information & Charting Requirements: Harold H. Downey	426-3656	ATO-240
Manager, National Flight Data Center (Airports, ATC, Airways, Waypoint, Geographic Fix, Coordinates, & Notam Official Data Source): James Burns, Jr.	426-3288	ATO-250
Manager, ATC Procedures Division: Walter Mitchell	426-3725	ATO-300
Manager, Terminal ATC Procedures Branch: Richard Baker	426-8460	ATO-320
Helicopter ATC Procedures Specialist: Lt. Col. Robert Vandel	426-8460	ATO-320
Manager, En Route ATC Procedures Branch: Russell Scarberry	426-8630	ATO-330
Manager, FSS Procedures Branch: Jerry W. Ball	426-8802	ATO-360
Manager, Operations Division: Dan Creedon	426-8310	ATO-400
Associate Admin. for Aviation Standards: Anthony J. Broderick	426-3131	AVS-1
Deputy Associate Administrator of Aviation: William Hendricks (Acting)	426-3133	AVS-2
Manager, Aircraft Engineering Division: Thomas McSweeny	426-8160	AWS-100
Manager, Aircraft Manufacturing Division: Sandy DeLucia (Acting)	426-8361	AWS-200
Federal Air Surgeon, Office of Aviation Medicine: Frank H. Austin, Jr., MD	426-3535	AAM-1
Manager, Aeromedical Standards Division: William H. Hark, MD	426-3802	AAM-200
Director, Office of Civil Aviation Security: Billie H. Vincent	426-9863	ACS-1
Aviation Security Division: John M. Hunter	426-8701	ACS-100
Director, Rotorcraft Program Office: (Vacant)	426-3425	ARO-1
Military Assistant: Lt. Col. Lawrence P.Peduzzi	426-3425	ARO-3
Technical Program Officer/Chairman: (Vacant)	426-8748	ARO-4
Technical Program Officer: David W. Ostrowski	426-8748	ARO-5
Technical Program Officer: ROTAF Chairman: Robert M. Barton	426-8748	ARO-6
Program Analyst: Judy Leach	426-3425	ARO-7
Director, Office of Aviation Safety: William R. Fromme	426-2604	ASF-1
Director, Office of Airworthiness: M. Craig Beard	426-8235	AWS-1
Director, Office of Flight Standards: John S. Kern (Acting)	426-8237	AFS-1*
(*AFS, formerly AFO, has assumed its name & original office symbol-AFS)		
Manager, Air Transportation Division (Part 135): Daniel C. Beaudette (Acting)	426-8166	AFS-200
Flight Procedures & Standards Branch (TERPs): Donald K. Funai	426-8277	AFS-230
Manager, Commuter & Air Taxi Branch: David Kress (Acting)	426-8086	AFS-250
Helicopter Manager, Commmuter & Air Taxi Branch: Dick Birnbach	426-8086	AFS-250
Manager, Aircraft Maintenance Division: Raymond Ramakis	426-8237	AFS-300
Manager, General Aviation and Commercial (Part 91 & External loads): Carol S. Rayburn	426-8212	AFS-800
Manager, Accident Prevention Staff: Bill Cook	426-8102	AFS-806

	Direct phone	Mail code
Manager, Operations Branch: W. Michael Sacrey	426-8194	AFS-820
Helicopter Manager, Operations Branch: Roger Baker	426-8194	AFS-820
Director, Aviation Standards Nat'l Field Office (Oklahoma City): Robert L. Goodrich	405-686-2305	AVN-1
Manager, Regulatory Support Division: Dick Hall (Acting)	405-749-4431	AVN-100
Manager, Flight Programs Division: Gary W. Wirt	405-749-2766	AVN-200
Manager, Standards Development Branch: Jimmie C. Savage	405-749-2766	AVN-210
Manager, Aircraft Maintenance and Engineering Division: Alvin E. Harrison, Jr.	405-749-4126	AVN-300

FAA Alaskan Region Headquarters
701 C Street, Box 14
Anchorage, Alaska 99513
Area code: 907

Director: Franklin L. Cunningham	271-5645	AAL-1
Acting Manager, Flight Standards Division: Tom Westall	271-5514	AAL-200
Manager, Air Traffic Division: Robert F. Harik	271-5464	AA1-500
Manager, Airports Division: Robie B. Strickland	271-5438	AAL-600

FAA Central Region Headquarters
601 East 12th Street
Federal Building
Kansas City, Missouri 64106
Area code: 816

Director, Central Region Headquarters Edwin S. Harris	374-5626	ACE-1
Manager, Flight Standards Division: James O. Robinson	374-5003	ACE-200
Manager, Aircraft Certification Division: Jack A. Sain	273-7100	ANE-100
Manager, Air Traffic Division: Ted Beckloff, Jr. (Acting)	374-5206	ACE-200
Manager, Airports Division: Wm. Jack Sasser	374-5278	ACE-600

FAA Eastern Region Headquarters
JFK International Airport
Federal Building
Jamaica, New York 11430
Area code: 212

Director: Joseph M. Del Balzo	917-1005	AEA-1
Manager, Flight Standards Division: James E. Haight	917-1124	AEA-200
Manager, Air Traffic Division: Edmund Spring	917-1219	AEA-500
Manager, Airports Division: Lawrence Walsh (Acting)	917-1239	AEA-600

FAA European Office Headquarters
15 Rue de la Loi (3rd floor)
B-1040 Brussels, Belgium
(Mail address: c/o American Embassy, APO,
New York 09667)

Director: Phillip M. Swatek	AUT-314-458-2225	AEU-1
Manager, Flight Standards Staff: Roger R. Jones	AUT-314-458-2234	AEU-200
Manager, Air Traffic Staff: Lonnie D. Parrish	AUT-314-458-2227	AEU-500

FAA Great Lakes Region Headquarters
O'Hare Lake Office Center
2300 East Devon Avenue
Des Plaines, Illinois 60018
Area code: 312

Director: Paul K. Bohr	694-7294	AGL-1
Manager, Flight Standards Division: George MacArthur	694-7252	AGL-200
Manager, Air Traffic Division: Kenneth C. Patterson	694-7202	AGL-500
Manager, Airports Division: Monte Belger	694-7272	AGL-600

FAA New England Region Headquarters
12 New England Executive Park
Burlington, Massachusetts 01803
Area code: 617

Director: Robert E. Whittington	273-7244	ANE-1
Manager, Flight Standards Division: William H. Williams, Jr.	273-7341	ANE-200
Manager, Air Traffic Division: James I. Lucas	273-7285	ANE-500
Manager, Airports Division: Gerald D. Curtin	273-7235	ANE-600

FAA Northwest Mountain Region Headquarters
17900 Pacific Highway South
C-68966
Seattle, Washington 98168
Area code: 206

Director: Charles R. Foster	431-2001	ANM-1
Manager, Aircraft Certification Division: Leroy Keith	431-2100	ANM-100
Manager, Flight Standards Division: Tom Howard	431-7040	ANM-200
Manager, Air Traffic Division: David E. Jones	431-2500	ANM-500
Manager, Airports Division: Edward G. Tatum	431-2600	ANM-600

FAA Southern Region Headquarters
3400 Norman Berry Drive
East Point, Georgia
(Mail address: P.O. Box 20636,
Atlanta, Georgia 30320)
Area code: 404

Director: Jonathan Howe	763-7222	ASO-1
Acting Manager, Flight Standard Division: William Berry	763-7401	ASO-200
Manager, Air Traffic Division: Thomas H. Protiva	763-7461	ASO-500
Manager, Airports Division: William J. McGill	763-7288	ASO-600

FAA Southwest Region Headquarters
4400 Blue Mound Road
(Mail address P.O. Box 1689)
Fort Worth, Texas 76101
Area code: 817

Director: C.R. Melugin, Jr.	877-2100	ASW-1
Manager, Aircraft Certification Division: Don P. Watson	877-2581	ASW-100
Manager, Helicopter Policy and Procedures Staff: John J. Shapley	877-2584	ASW-110
Manager, Helicopter Certification Branch: James D. Erickson	877-2083	ASW-170
Manager, Airports Divison: John A. Dufficy	877-2600	ASW-600
Manager, Flight Standards Division: Roger G. Knight	877-2137	ASW-200
Manager, Air Traffic Division: Richard L. Failor	877-2189	ASW-500

FAA Technical Center
Atlantic City Airport, New Jersey 08405
Area code: 609

Director, Technical Center: Larry Williams	484-6641	ACT-1
Dep. Director: Arlene Feldman	484-6653	ACT-2
Supervisor, Guidance and Airborne Systems: Robert H. Pursel	484-6918 484-1919	ACT-140

FAA Western-Pacific Region Headquarters
15000 Aviation Boulevard
Hawthorne, California
(Mail address: P.O. Box 92007
Worldway Postal Center
Los Angeles, California 90009)
Area code: 213

Director: H.C. McClure	536-6427	AWP-1
Manager, Flight Standards Division: Timothy P. Forte	297-1251	AWP-200
Manager, Air Traffic Division: Wayne Newcomb	536-6226	AWP-500
Manager, Airports Division: Herman C. Bliss	536-6240	AWP-600

Uruguay

Col. L. E. Revello
Director General of Civil Aviation Department
Calle Mercedes 1256
Montevideo, Uruguay

Venezuela

Ing. Fernando Curiel
Director General de Sectorial de Transporte Aereo
Ministerio de Transporte y Communicacione
Torre Bandagro Piso 9
Caracas 1010, Venezuela

Yemen Arab Republic

Aia Al Makaleh
Director General of Civil Aviation & Met. Authority
P.O. Box 1042
Sena Yemen Arab Republic

Yugoslavia

Mustafa Pljakic
President Federal Committee for
Transport & Communications
Air Transport Sector
Bulevar AVNOJ 104
4U-11070 Belgrade, Yugoslavia

Zaire

S. P. Madyiwa
Director of Civil Aeronautics Department
B. P. 6514
Kinshasa/N' dolo, Zaire

Zambia

Director of Civil Aviation Department
P.O. Box RW 137
Lusaka, Zambia

Zimbabwe

Stan Madyiwa
Director of Civil Aviation Department
Private Bag 7716, Causeway
Harare, Zimbabwe

GARRETT
Bell Helicopter TEXTRON
The future is ours by design.

A unique combination

Double your exposure in 1987

Participate as one of more than 260 civil helicopter industry exhibitors expected at the 39th Helicopter Association International Annual Meeting & Industry Exposition, February 26 – 28, 1987 in Dallas, Texas ... the world's most concentrated gathering of qualified buyers.

And then ...

Double your exposure with an advertisement in The 1987 Helicopter Annual ... an unmatched industry reference guide. With its controlled circulation, your message reaches every known operator in the world, including corporate, government and law enforcement flight departments.

... And the annual is in use by them for an entire year.

1986
HELICOPTER
ANNUAL

Special combination rate for exhibitors

Exhibiting firms will receive a special combination rate for advertising space in The 1987 Helicopter Annual.

For more information, fill out and return the postpaid reply cards on page 80, or call HAI at 703-683-4646.

**Helicopter
Association
International**

U.S. civil aviation policymakers

The following legislators have assigned responsibilities in forming U.S. policy affecting commercial helicopter operations.

Senators may be contacted at their direct telephone numbers or this address:
U.S. Senate, Washington, D.C. 20510.

Sen. Mark Andrews (R-ND)
Chairman, Transportation and Related Agencies Subcommittee
☎ 202-224-2043

Sen. Rudy Boschwitz (R-MN)
Chairman, Subcommittee on Export Promotion
☎ 202-224-5641

Sen. John C. Danforth (R-MO)
Chairman, Subcommittee on Regulatory Affairs
☎ 202-224-6154

Sen. Robert Dole (R-KS)
Chairman, Finance Committee
☎ 202-224-6521

Sen. David Durenberger (R-MN)
Chairman, Subcommittee on Intergovernmental Relations
☎ 202-224-3244

Sen. Jake Garn (R-UT)
Chairman, Subcommittee on HUD-Independent Agencies
☎ 202-224-5444

Sen. Slade Gorton (R-WA)
Chairman, Subcommittee on Science, Technology & Space
☎ 202-224-2621

Sen. Mark Hatfield (R-OR)
Chairman, Appropriations Committee
☎ 202-224-3753

Sen. Nancy Kassebaum (R-KS)
Chairman, Aviation Subcommittee
☎ 202-224-4774

Sen. James A. McClure (R-ID)
Chairman, Committee on Energy and Natural Resources
☎ 202-224-2752

Sen. Don Nickles (R-OK)
Chairman, Subcommittee on Government Procurement
☎ 202-224-5754

Sen. Bob Packwood (R-OR)
Chairman, Commerce, Science and Transportation Committee
☎ 202-224-5244

Sen. William V. Roth (R-DE)
Chairman, Committee on Governmental Affairs
☎ 202-224-2441

Sen. Warren Rudman (R-NH)
Chairman, Subcommittee on Innovation and Technology
☎ 202-224-3224

Sen. Robert Stafford (R-VT)
Chairman, Environment and Public Works Committee
☎ 202-224-5141

Sen. Ted Stevens (R-AK)
Chairman, Subcommittee on Defense
☎ 202-224-3004

Sen. Steve Symms (R-ID)
Chairman, Transportation Subcommittee
☎ 202-224-6142

Sen. Lowell P. Weicker (D-CT)
Chairman, Committee on Small Business
☎ 202-224-4041

Representatives may be contacted at their direct telephone numbers or this address:
U.S. House of Representatives, Washington, D.C. 20515

Rep. Joseph Addabbo (D-NY)
Chairman, Subcommittee on Defense
☎ 202-225-3461

Rep. Edward P. Boland (D-MA)
Chairman, Subcommittee on HUD-Independent Agencies
☎ 202-225-5601

Rep. Don Bonker (D-WA)
Chairman, Subcommittee on International Economic Policy and Trade
☎ 202-225-3536

Rep. Jack Brooks (D-TX)
Chairman, Committee on Government Operations
☎ 202-225-6565

Rep. James J. Florio (D-NJ)
Chairman, Subcommittee on Commerce, Transportation and Tourism
☎ 202-225-6501

Rep. Dan Fuqua (D-FL)
Chairman, Science and Technology Committee
☎ 202-225-5235

Rep. Dan Glickman (D-KS)
Chairman, Transportation, Aviation and Materials Subcommittee
☎ 202-225-6216

Rep. James Howard (D-NJ)
Chairman, Public Works and Transportation Committee
☎ 202-225-4671

Rep. Ike Skelton (D-FL)
Chairman, Subcommittee on Export Opportunities
☎ 202-225-2876

Rep. William Lehman (D-FL)
Chairman, Subcommittee on Transportation
☎ 202-225-4211

Rep. Elliot H. Levitas (D-GA)
Chairman, Subcommittee on Investigations and Oversight
☎ 202-225-4272

Rep. Norman Mineta (D-CA)
Chairman, Aviation Subcommittee
☎ 202-225-2631

Rep. Parren J. Mitchell (D-MD)
Chairman, Committee on Small Business
☎ 202-225-4741

Rep. Dan Rostenkowski (D-IL)
Chairman, Ways and Means Committee
☎ 202-225-4061

Rep. Jamie Whitten (D-MS)
Chairman, Appropriations Committee
☎ 202-225-4306

FLY NEIGHBORLY
HELICOPTER ASSOCIATION INTERNATIONAL
FLY NEIGHBORLY GUIDE

Be good to your neighbor

The Fly Neighborly Guide is available free to HAI members. The guide is the only digest of its kind and covers all aspects of the noise problem . . . from recommended operative practices to procedures for developing a good community relations program.

Order your copy today. Call or write:
Helicopter Association International
1619 Duke Street
Alexandria, VA 22314-3406
Telephone: 703-683-4646. Telex: 89-615

Or return the information reply card on page 144.

Be good to your neighbor.

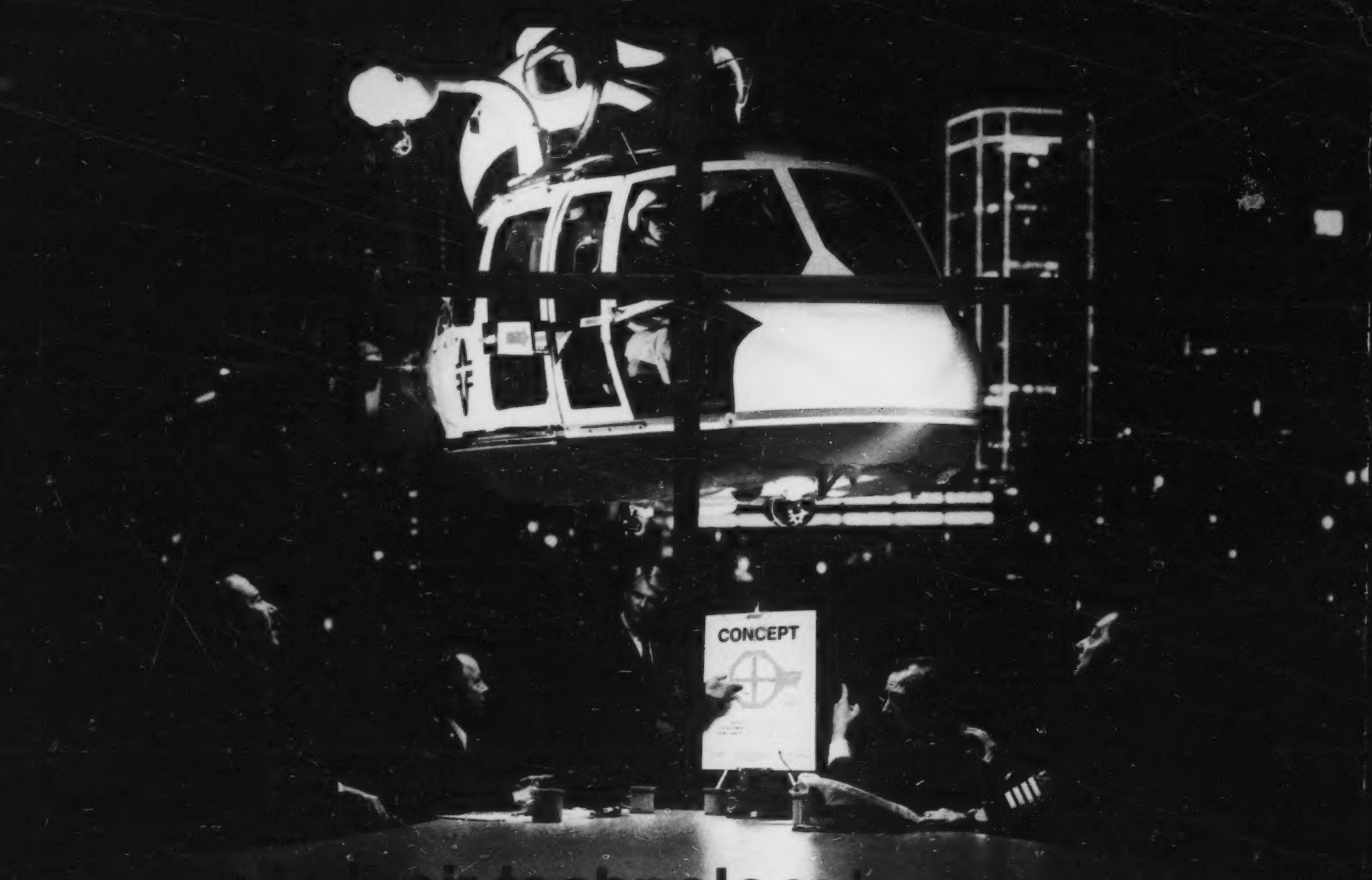
Helicopter Association International

Here are
some of
the world's
most advanced
helicopters:
Black Hawk, Apache,
214ST, Seahawk,
Night Hawk,
SuperCobra,
S-70, W30, EH 101,
Seasprite.

What else do they
have in common?
General Electric T700/CT7
turboshaft engines.

Aircraft Engine
Business Group

● A registered trademark of General Electric Company.



While their technology's on paper, ours is in the air.

With a 10 year and 3 million hour headstart.

While other helicopter manufacturers are still in the planning stages of a major breakthrough — we're flying ours.

Putting Aerospatiale on the cutting edge of composite materials technology took a lot of hard work. But it paid off. Now we're not only able to offer you the proven technology you need today, we're able to save you time and money on research and development.

This could mean millions of dollars. Now consider the advantages:

Our fourth generation composite rotor blades. They're significantly lighter than conventional blades and capable of flying at 200 plus knots.

Our advanced starflex rotor head. It's the industry's only all-composite rotor head, made up of 70% fewer parts and 60% less weight than conventional rotor heads. And bearings that require no lubrication.

Our vibration dampening systems. With this new technology we're able to dampen the vibration that can occur when you hit 200kts. This is no small feat.

Our fenestron, the original shrouded tail rotor. Designed to increase safety while reducing maintenance. The fan-in-fin design also increases performance. After ten years, it's a proven success and the only one of its kind.

Our advanced flight management integration. This ability prompted the U.S. Coast Guard to choose Aerospatiale's Dauphin 2 to form the foundation of their new SRR aircraft — the HH65A Dolphin.

Those are the facts, now consider the bottom line. Aerospatiale is an approved government contractor. And we're ready to supply you with the proven technology the others are just talking about. It's up to you. Would you rather spend millions on talk — or technology?

For more information contact Paul Domanovsky, Vice President — Programs/Government Requirements, Aerospatiale Helicopter Corporation, 2701 Forum Drive, Grand Prairie, Texas 75053-4005. (214) 641-0000.

aerospatiale
helicopter corporation

that's special.that's **aerospatiale.**

Direct Operating Costs and Safety

by James A. Hamilton

The commercial helicopter industry began, grew, and prospered with spinoffs of military designs. This evolutionary introduction of new technology into helicopters certainly is preferable to forcing the operator to become a developer, assuming much of the costly learning burden. When you consider the V-22 tilt rotor, LHX and several international programs on the horizon, major technological advances are certain to be implemented in the commercial spinoffs: more efficient engines, lower empty weight through composites, reduced maintenance and higher productivity, with more speed and range.

Given the fact that, in the near term, neither manufacturers nor operators can afford the tremendous investment required to develop new helicopters specifically for the commercial market, consider a few of the positive effects.

Helicopters that were introduced in the years dovetailing the start of the present recession have matured and are excellent machines moving into their most productive years. The birthing is over, bugs have been worked out, and both the builders and users are well along the learning curve. Performance and reliability continue to improve.

Although concern with direct operating costs (DOC) dates back four decades to the development of the Model 47 by Arthur Young, DOC as a full-blown, top-priority effort is relatively new. Yet, in the past few years, it has become perhaps the singlemost productive joint venture of manufacturers and operators.

In 1978, Bell's top project engineers, program managers, application engineers and product support management formed the company's specially commissioned Direct Operating Cost Board. Its charter was straightforward: "The primary emphasis...will be on reducing operators' cost through maintenance plan changes, increases in retirement lives, changes in on-condition maintenance from hard time where cost effective, and increases in reliability or reductions in parts costs." A single DOC Board has grown in mission, influence and responsibility to become two separate Boards; one for light helicopters and one for medium.

Since product development is the key to lower operating costs, management in all areas of engineering has been aggressively active in learning, reviewing and affecting improvements in DOC—related to the components for which they have design responsibility. DOC consideration has found its place as a permanent decision factor on the same level as safety, noise, vibration, weight, strength and commonality. And, they were given the R & D funds necessary to do the job.

Results have been beyond expectations. During the past four years, the lives or TBOs of more than 45 major components have doubled, tripled, quadrupled or even quintupled. DOC on some components has dropped to one-tenth of previous dollar-per-hour costs.

Cost data voluntarily submitted by operators is the most valued DOC input and is treated with absolute confidentiality. Nothing published or distributed is linked to any operator. His data are always part of a whole. It is gratifying that more and more operators are participating in this effort which benefits everyone in the long run.

Although Bell believes it was the first to form DOC Boards and widen their scope of activity, other manufacturers—airframe and engine—also are engaged in similar programs.

The same type of cooperation and sharing of information is evident in increasingly harmonious relationships among designers and operators, often through HAI and AHS, in the area of safety.

HAI, for example, passed a resolution that in future design of twin-engine helicopters the throttle be on the collective. Bell has already taken the lead in doing this.

Also safety related, Bell recently compiled and distributed to all its U.S. and Canadian customer service facilities a list, by serial numbers, of helicopters which have been reported by the NTSB or FAA as having been destroyed, but which remain on the U.S. Aircraft Registry. Safety aspects notwithstanding, a purchaser of one of these aircraft could have a helicopter which is not eligible for license and/or insurance.

We are working hand-in-hand; manufacturers, operators and professional associations—and nothing but good can come of these cooperative efforts.

James A. Hamilton is Vice President-Commercial Marketing for Bell Helicopter Textron Inc. He is responsible for sales of Bell products to commercial and civil agency customers in the U.S. and Canada.

Hamilton joined Bell in 1961, serving successively as Regional Marketing Manager, Divisional Marketing Manager and Manager of Medium Helicopter Sales until 1974. He returned to the company in 1982 and was named to his present position in March 1983.

He is a graduate of Wayne University, Detroit, Michigan, with a degree in Business Administration and pursued post-graduate studies in the Sales and Marketing Executives' Graduate School at Syracuse University.

A fixed wing and helicopter pilot, Hamilton served in the U.S. Navy and attained the rank of Lt. Commander, which he now holds in the Naval Reserves.

The civil helicopter

Significant data on every helicopter manufactured by HAI Associate Members in the past ten years.

Today's helicopter fleet offers a broad range of aircraft, uniquely able to perform a variety of missions.

This section lists the most significant data for every helicopter manufactured by HAI associate members in the past ten years.

All data are listed in both English and Metric units of measure. In addition, such key data as maximum optional fuel capacity, engine horsepower, range with optional fuel and a listing of standard avionics provide a complete picture of each machine's capabilities.

This information is to be used solely as a guide. Helicopter capabilities will vary with flight conditions and installed options.

Data and operating limitations for specific missions are available from the manufacturer. A manufacturer's contact and phone number is listed for each model. Prices shown are subject to change by the manufacturer.

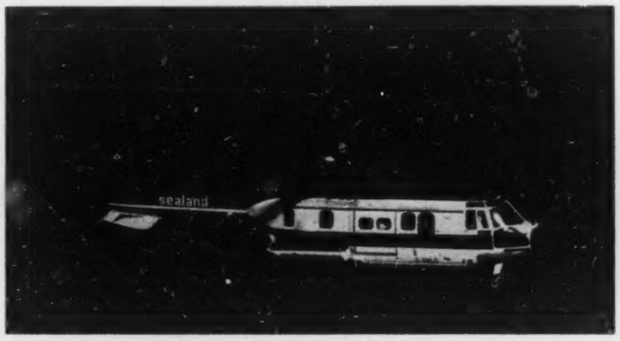
Contents

Aerospatiale	*34*
Agusta	*39*
Bell	*39*
Boeing	*44*
California	*45*
E. H. Industries	*46*
Enstrom	*46*
Hiller	*48*
Kawasaki	*48*
MBB	*50*
McDonnell Douglas	*53*
Robinson	*53*
Schweizer	*53*
Sikorsky	*54*
Soloy	*55*
Westland	*56*

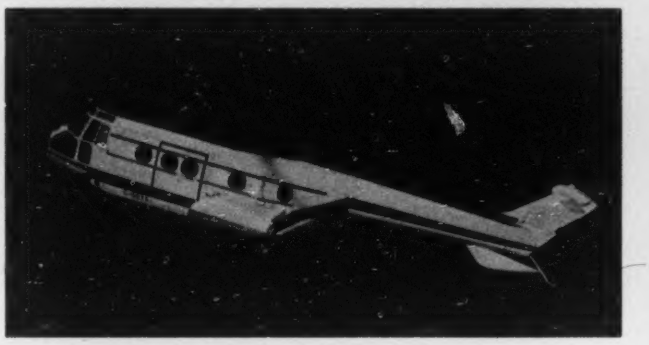
Manufacturer/Model Aerospatiale Lama
Total production (all variants) 383 **First flight** 1969
Comments Specifications shown are for SA315B Lama. This aircraft holds absolute altitude record for helicopters of any category: 40,820 ft/12,442 m by Jean Boulet in 1972.
Engine(s) (1) Artouste III B1 **HP (takeoff)** 590 shp
Dimensions main rotor 36.2 ft/11 m **Tail rotor** 6.3 ft1.9 m
Height 10.1 ft/3.1 m **Length** 42.3 ft/12.9 m **Width** 7.8 ft/2.4 m
Empty weight 2,266 lbs/1,028 kg **Gross weight** 4,300 lbs/1,950 kg
Useful load 2,034 lbs/922 kg **External** 2,646 lbs/1,200 kg
Vne 113 kts/209 kmh **Max cruise** 103 kts/192 kmh
Max rate of climb 1,083 fpm/330 mpm
HIGE 16,565 ft/5,050 m **HOGE** 15,100 ft/4,600 m
Service ceiling 17,720 ft/5,400 m **S/E service ceiling** N/A
Std fuel 152 gal/573 lit **Max fuel** N/A
Max range std fuel (no reserve) 278 nm/515 km
Range with opt fuel N/A
VFR Crew 1 **Passengers** 4
Standard avionics None. Optional factory installed avionics available.
1986 base price ($ U.S.) $560,000
For more information contact Ron LaFleur, (214) 641-0000

Manufacturer/Model Aerospatiale Super Frelon
Total production (all variants) 105 **First flight** 1962
Comments Specifications shown are for SA321JA Super Frelon.
Engine(s) (3) Turbomeca Turmo III C6 **HP (takeoff)** 1,515 shp ea.
Dimensions main rotor 62.0 ft/18.9 m **Tail rotor** 13.1 ft/4.0 m
Height 21.9 ft/6.7 m **Length** N/A **Width** 16.1 ft/4.9 m
Empty weight 15,245 lbs/6,915 kg **Gross weight** 28,660 lbs/13,000 kg
Useful load 13,415 lbs/6,085 kg **External** 11,000 lbs/5,000 kg
Vne 148 kts/275 kmh **Max cruise** 134 kts/248 kmh
Max rate of climb 1,300 fpm/396 mpm
HIGE 6,230 ft/1,900 m **HOGE** limited to 27,515 lbs/2,480 kg at sea level
Service ceiling 10,000 ft/3,050 m **S/E service ceiling** * 3,940 ft/1,200 m on 2 engines. *One engine out. Two engine service ceiling.
Std fuel 1,030 gal/3,900 lit **Max fuel** 1,822 gal/6,897 lit
Max range std fuel (no reserve) 432 nm/800 km @ 126 kts/232 kmh
Range with opt fuel 764 nm/1,416 km
VFR Crew 2 **Passengers** 27
Standard avionics SFIM autopilot
1986 base price ($ U.S.) Not established
For more information contact Ron LaFleur, (214) 641-0000

Manufacturer/Model Aerospatiale Puma
Total production (all variants) 700 **First flight** 1965
Comments Specifications shown are for SA330J Puma.
Engine(s) (2) Turbomeca Turmo IV C **HP (takeoff)** 1,494 shp ea.
Dimensions main rotor 49.5 ft/15.1 m **Tail rotor** 10.0 ft/3.0 m
Height 16.9 ft/5.1 m **Length** 59.8 ft/18.2 m **Width** 9.8 ft/3.0 m
Empty weight 8,358 lbs/3,792 kg **Gross weight** 16,315 lbs/7,400 kg
Useful load 7,957 lbs/3,608 kg **External** 7,055 lbs/3,200 kg
Vne 142 kts/263 kmh **Max cruise** 139 kts/258 kmh
Max rate of climb 1,200 fpm/366 mpm
HIGE 7,545 ft/2,300 m **HOGE** 5,580 ft/1,700 m
Service ceiling 15,750 ft/4,800 m **S/E service ceiling** 7,220 ft/2,200 m
Std fuel 408 gal/1,544 lit **Max fuel** 1,098 gal/4,156 lit
Max range std fuel (no reserve) 297 nm/550 km @ 134 kts/248 kmh
Range with opt fuel 799 nm/1,481 km
VFR Crew 2 **Passengers** 18
Standard avionics None. Optional factory installed avionics available.
1986 base price ($ U.S.) Out of production
For more information contact Ron LaFleur, (214) 641-0000



Manufacturer/Model Aerospatiale Super Puma
Total production (all variants) 126 ("C" & "L") **First flight** 1978
Comments Specifications shown are for AS332L Super Puma.
Engine(s) (2) Turbomeca Makila 1A **HP (takeoff)** 1,661 shp ea.
Dimensions main rotor 51.2 ft/15.6 m **Tail rotor** 10.0 ft/3.1 m
Height 16.1 ft/4.9 m **Length** 61.4 ft/18.7 m **Width** 11.1 ft/3.4 m
Empty weight 9,560 lbs/4,335 kg **Gross weight** 18,960 lbs/8,600 kg
Useful load 9,400 lbs/4,265 kg **External** 9,920 lbs/4,500 kg
Vne 150 kts/278 kmh **Max cruise** 144 kts/266 kmh
Max rate of climb 1,595 fpm/486 mpm
HIGE 8,200 ft/2,500 m **HOGE** 6,070 ft/1,850 m
Service ceiling 130 ft/4,200 m **S/E service ceiling** 5,250 ft/1,600 m
Std fuel 544 gal/2,059 lit **Max fuel** 1,344 gal/5,088 lit
Max range std fuel (no reserve) 459 nm/850 km @ 138 kts/256 kmh
Range with opt fuel 1,207 nm/2,235 km
VFR Crew 2 **Passengers** 23
Standard avionics SFIM AP155P autopilot
1986 base price ($ U.S.) $4,610,000 ("L" Model)
For more information contact Ron LaFleur, (214) 641-0000



Manufacturer/Model Aerospatiale Super Puma
Total production (all variants) 126 ("C" & "L") **First flight** 1978
Comments Specifications shown are for AS332C Super Puma.
Engine(s) (2) Turbomeca Makila **HP (takeoff)** 1,661 shp ea.
Dimensions main rotor 51.2 ft/15.6 m **Tail rotor** 10.0 ft/3.1 m
Height 16.1 ft/4.9 m **Length** 61.4 ft/3.1 m **Width** 11.1 ft/3.4 m
Empty weight 9,260 lbs/4,200 kg **Gross weight** 18,410 lbs/8,350 kg
Useful load 9,150 lbs/4,150 kg **External** 9,920 lbs/4,500 kg
Vne 160 kts/296 kmh **Max cruise** 151 kts/279 kmh
Max rate of climb 1,732 fpm/528 mpm
HIGE 8,856 ft/2,700 m **HOGE** 6,888 ft/2,100 m
Service ceiling 15,088 ft/4,600 m **S/E service ceiling** 6,232 ft/1,900 m
Std fuel 406 gal/1,537 lit **Max fuel** 1,206 gal/4,565 lit
Max range std fuel (no reserve) 343 nm/635 km @ 140 kts/259 kmh
Range with opt fuel 1,019 nm/1,888 km
VFR Crew 2 **Passengers** 18
Standard avionics SFIM AP155P autopilot
1986 base price ($ U.S.) Out of production
For more information contact Ron LaFleur, (214) 641-0000

Manufacturer/Model Aerospatiale Gazelle
Total production (all variants) 1,117 **First flight** 1967
Comments Specifications shown are for SA342J Gazelle.
Engine(s) (1) Turbomeca Astazou XIV H **HP (takeoff)** 592 shp
Dimensions main rotor 34.5 ft/10.5 m **Tail rotor** 2.3 ft/0.7 m
Height 10.5 ft/3.2 m **Length** 39.3 ft/12 m **Width** 6.6 ft/2 m
Empty weight 2,164 lbs/982 kg **Gross weight** 4,190 lbs/1,900 kg
Useful load 2,026 lbs/918 kg **External** 1,540 lbs/700 kg
Vne 167 kts/310 kmh **Max cruise** 142 kts/264 kmh
Max rate of climb 2,010 fpm/613 mpm
HIGE 11,970 ft/3,650 m **HOGE** 9,430 ft/2,875 m
Service ceiling 14,105 ft/4,300 m **S/E service ceiling** N/A
Std fuel 144 gal/545 lit **Max fuel** 197 gal/745 lit
Max range std fuel (no reserve) 407 nm/754 km @ 128 kts/238 kmh
Range with opt fuel 557 nm/1,032 km
VFR Crew 1 **Passengers** 4
Standard avionics None. Optional factory installed avionics available.
1986 base price ($ U.S.) Not established.
For more information contact Ron LaFleur, (214) 641-0000

SAFT
Nickel
Cadmium
Battery

NOBODY STARTS FASTER

Believe it! Nobody starts jets or spools up turbine helicopters faster than Saft.

It takes an exceptional battery to handle the frequent stops and starts of today's high performance turbines.

Slow starts mean high temperatures and heavy stress on engine hot sections.

But a Saft battery handles the pressures of stopping and starting turbine engines. Without excessive engine wear. Because the Saft battery gives significantly greater starting power. And sustains the power longer.

If you have any doubts, write for our Application Guide. It clearly and quickly tells why there isn't a faster, cooler, easier way to start turbine aircraft engines than with the right Saft battery.

SAFT APPLICATION GUIDE

For your free copy write:
SAFT America Inc.
Application Guide
711 Industrial Blvd.
Valdosta, GA 31601
or call (912) 247-2331

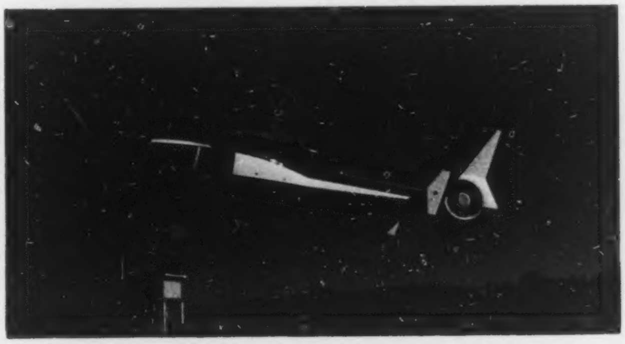
SAFT

MORE POWER TO YOU.

Manufacturer/Model Aerospatiale Ecureuil
Total production (all variants) 798 ("B" & "D") **First flight** 1976
Comments Specifications shown are for AS350B Ecureuil.
Engine(s) (1) Turbomeca Arriel 1B **HP (takeoff)** 641 shp
Dimensions main rotor 35.1 ft/10.7 m **Tail rotor** 6.1 ft/1.9 m
Height 10.3 ft/3.2 m **Length** 42.6 ft/13 m **Width** 8.3 ft/2.5 m
Empty weight 2,428 lbs/1,101 kg **Gross weight** 4,300 lbs/1,950 kg
Useful load 1,872 lbs/849 kg **External** 2,000 lbs/907 kg
Vne 147 kts/272 kmh **Max cruise** 125 kts/232 kmh
Max rate of climb 1,555 fpm/474 mpm
HIGE 9,675 ft/2,950 m **HOGE** 7,380 ft/2,250 m
Service ceiling 15,600 ft/4,750 m **S/E service ceiling** N/A
Std fuel 137 gal/520 lit **Max fuel** 263 gal/995 lit
Max range std fuel (no reserve) 378 nm/700 km @ 121 kts/224 kmh
Range with opt fuel 726 nm/1,345 km
VFR Crew 1 **Passengers** 6
Standard avionics None. Optional factory installed avionics available.
1986 base price ($ U.S.) $480,000
For more information contact Ron LaFleur, (214) 641-0000

Manufacturer/Model Aerospatiale AStar Mark III
Total production (all variants) 798 ("B" & "D") **First flight** 1976
Comments Specifications shown are for AS350D AStar Mark III.
Engine(s) (1) Avco Lycoming LTS 101-600A3 **HP (takeoff)** 615 shp
Dimensions main rotor 35.1 ft/10.7 m **Tail rotor** 6.1 ft/1.9 m
Height 10.3 ft/3.2 m **Length** 42.6 ft/13 m **Width** 8.3 ft/2.5 m
Empty weight 2,432 lbs/1,103 kg **Gross weight** 4,300 lbs/1,950 kg
Useful load 1,868 lbs/847 kg **External** 2,000 lbs/907 kg
Vne 147 kts/272 kmh **Max cruise** 125 kts/232 kmh
Max rate of climb 1,713 fpm/522 mpm
HIGE 8,858 ft/2,700 m **HOGE** 5,577 ft/1,700 m
Service ceiling 13,451 ft/4,100 m **S/E service ceiling** N/A
Std fuel 137 gal/520 lit **Max fuel** 263 gal/995 lit
Max range std fuel (no reserve) 405 nm/750 km @ 108 kts/200 kmh
Range with opt fuel 777 nm/1,441 km
VFR Crew 1 **Passengers** 6
Standard avionics None. Optional factory installed avionics available.
1986 base price ($ U.S.) $480,000
For more information contact Ron LaFleur, (214) 641-0000

Manufacturer/Model Aerospatiale Ecureuil 2/TwinStar
Total production (all variants) 305 **First flight** 1979
Comments Specifications shown are for AS355F-1 Ecureuil 2/TwinStar
Engine(s) (2) G.M. Allison 250-C20F **HP (takeoff)** 420 shp ea.
Dimensions main rotor 35.1 ft/10.7 m **Tail rotor** 6.1 ft/1.9 m
Height 10.2 ft/3.1 m **Length** 42.6 ft/13 m **Width** 8.3 ft/2.5 m
Empty weight 2,900 lbs/1,315 kg **Gross weight** 5,291 lbs/2,400 kg
Useful load 2,391 lbs/1,085 kg **External** 2,300 lbs/1,043 kg
Vne 150 kts/278 kmh **Max cruise** 124 kts/230 kmh
Max rate of climb 1,496 fpm/456 mpm
HIGE 7,880 ft/2,400 m **HOGE** 6,400 ft/1,950 m
Service ceiling 13,120 ft/4,000 m **S/E service ceiling** 2,790 ft/850 m
Std fuel 193 gal/730 lit **Max fuel** 319 gal/1,205 lit
Max range std fuel (no reserve) 391 nm/725 km @ 113 kts/210 kmh
Range with opt fuel 646 nm/1,198 km
VFR Crew 1 **Passengers** 6
Standard avionics None. Optional factory installed avionics available.
1986 base price ($ U.S.) $800,000
For more information contact Ron LaFleur, (214) 641-0000



Manufacturer/Model Aerospatiale Dauphin
Total production (all variants) 36 **First flight** 1972
Comments Specifications shown are for SA360C Dauphin.
Engine(s) (1) Turbomeca Astazou XVIII A **HP (takeoff)** 872 shp
Dimensions main rotor 37.7 ft/11.5 m **Tail rotor** 3.0 ft/0.9 m
Height 11.5 ft/3.5 m **Length** 43.3 ft/13.2 m **Width** 7.4 ft/2.2 m
Empty weight 3,797 lbs/1,722 kg **Gross weight** 6,615 lbs/3,000 kg
Useful load 2,818 lbs/1,278 kg **External** 2,866 lbs/1,300 kg
Vne 170 kts/315 kmh **Max cruise** 146 kts/270 kmh
Max rate of climb 1,400 fpm/427 mpm
HIGE 8,035 ft/2,450 m **HOGE** 5,740 ft/1,750 m
Service ceiling 14,270 ft/4,350 m **S/E service ceiling** N/A
Std fuel 169 gal/640 lit **Max fuel** 351 gal/1,330 lit
Max range std fuel (no reserve) 353 nm/655 km @ 133 kts/247 kmh
Range with opt fuel 733 nm/1,359 km
VFR Crew 1 **Passengers** 13
Standard avionics None. Optional factory installed avionics available.
1986 base price ($ U.S.) Out of production
For more information contact Ron LaFleur, (214) 641-0000

Manufacturer/Model Aerospatiale Dauphin 2
Total production (all variants) 342 **First flight** 1975
Comments Specifications shown are for SA365N Dauphin 2.
Engine(s) (2) Turbomeca Arriel 1C **HP (takeoff)** 700 shp ea.
Dimensions main rotor 39.1 ft/11.9 m **Tail rotor** 3.0 ft/0.9 m
Height 13.2 ft/4.0 m **Length** 44.2 ft/13.5 m **Width** 10.5 ft/3.2 m
Empty weight 4,513 lbs/2,047 kg **Gross weight** 8,818 lbs/4,000 kg
Useful load 4,305 lbs/1,953 kg **External** 3,527 lbs/1,600 kg
Vne 160 kts/297 kmh **Max cruise** 158 kts/292 kmh
Max rate of climb 1,536 fpm/468 mpm
HIGE 1,970 ft/600 m **HOGE** 1,970 ft/600 m
Service ceiling 13,615 ft/4,150 m **S/E service ceiling** 4,921 ft/1,500 m
Std fuel 302 gal/1,145 lit **Max fuel** 1,077 gal/4,076 lit
Max range std fuel (no reserve) 506 nm/937 km @ 140 kts/260 kmh
Range with opt fuel 1,097 nm/2,031 km
VFR Crew 1 **Passengers** 13
Standard avionics None. Optional factory installed avionics available.
1986 base price ($ U.S.) $1,990,000
For more information contact Ron LaFleur, (214) 641-0000

Manufacturer/Model Aerospatiale Super Puma
Total production (all variants) N/A **First flight** 1984
Comments Specifications shown are for AS332L1 Super Puma.
Engine(s) (2) Turbomeca Makila 1A1 **HP (takeoff)** 1,819 shp ea.
Dimensions main rotor 51.18 ft/15.6 m **Tail rotor** 10.0 ft/3.05 m
Height 16.14 ft/4.92 m **Length** 61.35 ft/18.7 m **Width** 11.08 ft/3.38 m
Empty weight 9,745 lbs/4,420 kg **Gross weight** 18,960 lbs/8,600 kg
Useful load 9,215 lbs/4,180 kg **External** 9,920 lbs/4,500 kg
Vne 150 kts/278 kmh **Max cruise** 144 kts/266 kmh
Max rate of climb 1,595 fpm/486 mpm
HIGE 10,168 ft/3,100 m **HOGE** 7,544 ft/2,300 m
Service ceiling 15,088 ft/4,600 m **S/E service ceiling** 6,888 ft/2,100 m
Std fuel 544 gal/2,059 lit **Max fuel** 1,344 gal/5,088 lit
Max range std fuel (no reserve) 470 nm/870 km @ 138 kts/256 kmh
Range with opt fuel 817 nm/1,514 km
VFR Crew 2 **Passengers** 25
Standard avionics None. Optional factory installed avionics available.
1986 base price ($ U.S.) $4,750,000.
For more information contact Ron LaFleur, (214) 641-0000

Manufacturer/Model Aerospatiale Ecureuil
Total production (all variants) 798 ("B" & "D") **First flight** N/A
Comments Specifications shown are for AS350B1 Ecureuil.
(Not available until fourth quarter 1986)
Engine(s) (1) Turbomeca Arriel 1D **HP (takeoff)** 684 shp.
Dimensions main rotor 35.1 ft/10.7 m **Tail rotor** 6.10 ft/1.86 m
Height 10.3 ft/3.14 m **Length** 42.45 ft/12.94 m **Width** 8.30 ft/2.53 m
Empty weight 2,447 lbs/1,110 kg **Gross weight** 4,850 lbs/2,200 kg
Useful load 2,403 lbs/1,090 kg **External** N/A
Vne 147 kts/276 kmh **Max cruise** 123 kts/277 kmh
Max rate of climb N/A
HIGE 9,515 ft/2,900 m **HOGE** 6,561 ft/2,000 m
Service ceiling 16,000 ft/5,000 m **S/E service ceiling** N/A
Std fuel 140 gal/530 lit **Max fuel** N/A
Max range std fuel (no reserve) N/A
Range with opt fuel N/A
VFR Crew 1 **Passengers** 5/6
Standard avionics None. Optional factory installed avionics available.
1986 base price ($ U.S.) $540,000.
For more information contact Ron LaFleur, (214) 641-0000

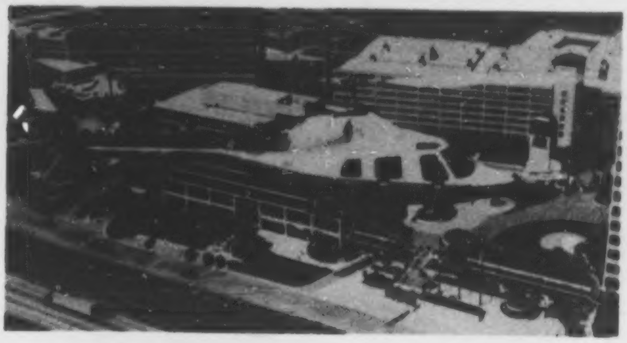
Manufacturer/Model Aerospatiale Ecureuil 2
Total production (all variants) N/A **First flight** N/A
Comments Specifications shown are for AS355F2 Ecureuil 2.
(Not available until fourth quarter 1986)
Engine(s) (2) Allison 250 C 20F **HP (takeoff)** 420 shp ea.
Dimensions main rotor 35.1 ft/10.7 m **Tail rotor** 6.10 ft/1.86 m
Height 10.3 ft/3.14 m **Length** 42.45 ft/12.94 m **Width** 8.3 ft/2.53 m
Empty weight 2,732 lbs/1,305 kg **Gross weight** 5,600 lbs/2,540 kg
Useful load 2,877 lbs/1,235 kg **External** 2,500 lbs/1,134 kg
Vne 150 kts/278 kmh **Max cruise** 124 kts/225 kmh
Max rate of climb 1,338 fpm/408 mpm
HIGE 6,560 ft/2,000 m **HOGE** 4,920 ft/1,500 m
Service ceiling 11,808 ft/3,600 m **S/E service ceiling** N/A
Std fuel 193 gal/730 lit **Max fuel** 318 gal/1,20[illegible] lit
Max range std fuel (no reserve) 386 nm/716 km @ 110 kts/203 kmh
Range with opt fuel N/A
VFR Crew 1 **Passengers** 5/6
Standard avionics None. Optional factory installed avionics available.
1986 base price ($ U.S.) $875,000.
For more information contact Ron LaFleur, (214) 641-0000

Manufacturer/Model Agusta 109A
Total production (all variants) 155 **First flight** 1971
Comments 1986 production will include standard widebody kit which enlarges passenger compartment.
Engine(s) (2) Detroit Allison 250 C20B **HP (takeoff)** 695 shp
Dimensions main rotor 36.1 ft/11 m **Tail rotor** 6.66 ft/2.03 m
Height 10.8 ft/3.29 m **Length** 35.1 ft/10.69 m **Width** 9.54 ft/2.88 m
Empty weight 3,750 lbs/1,701 kg **Gross weight** 5,730 lbs/2,599 kg
Useful load 1,980 lbs/898 kg **External** 2,000 lbs/907 kg
Vne 168 kts/311 kmh **Max cruise** 150 kts/278 kmh
Max rate of climb 1,430 fpm/436 mpm
HIGE 8,000 ft/2,430 m **HOGE** N/A
Service ceiling 15,000 ft/4,572 m **S/E service ceiling** 5,000 ft/1,524 m
Std fuel 146 gal/552.6 lit **Max fuel** N/A
Max range std fuel (no reserve) 365 nm/676 km
Range with opt fuel N/A
VFR Crew 1 **Passengers** 7
Standard avionics None. Optional factory installed avionics available.
1985 base price ($ U.S.)N/A
For more information contact Marketing Department (215)245-8860

Manufacturer/Model Agusta 109 MK II
Total production (all variants) 90 **First flight** 1971
Comments 1986 production will include standard widebody kit which enlarges passenger compartment.
Engine(s) (2) Detroit Allison 250 C20B **HP (takeoff)** 740 shp
Dimensions main rotor 36.1 ft/11 m **Tail rotor** 6.66 ft/2.03 m
Height 10.8 ft/3.29 m **Length** 35.1 ft/10.69 m **Width** 9.45 ft/2.88 m
Empty weight 3,258 lbs/1,699 kg **Gross weight** 5,730 lbs/2,599 kg
Useful load 2,472 lbs/1,120 kg **External** 2,000 lbs/907 kg
Vne 168 kts/311 kmh **Max cruise** 150 kts/278 kmh
Max rate of climb 1,650 fpm/503 mpm
HIGE 7,900 ft/2,408 m **HOGE** 4,900 ft/1,494 m
Service ceiling 15,000 ft/4,572 m **S/E service ceiling** 5,500 ft/1,676 m
Std fuel 146 gal/533 lit **Max fuel** 186 gal/704 lit
Max range std fuel (no reserve) 365 nm/676 km
Range with opt fuel 465 nm/861 km
VFR Crew 1 **Passengers** 7
Standard avionics None. Optional factory installed avionics available.
1985 base price ($ U.S.) N/A
For more information contact Marketing Department (215)245-8860

Manufacturer/Model Bell Helicopter Textron 205A-1
Total production (all variants) 350 + **First flight** 1967
Comments Currently not in production. External load gross weight = 10,500 lbs (4,762 kg).
Engine(s) (1) Lycoming T5313 B **HP (takeoff)** 1,400 shp
Dimensions main rotor 48 ft/14.6 m **Tail rotor** 8.5 ft/2.59 m
Height 14.4 ft/4.38 m **Length** 57.08 ft/17.4 m **Width** 9.3 ft/2.83 m
Empty weight 5,323 lbs/2,414 kg **Gross weight** 9.500 lbs/4,309 kg
Useful load 4,177 lbs/1,894 kg **External** 5,000 lbs/2,268 kg
Vne 110 kts/204 kmh **Max cruise** 110 kts/204 kmh
Max rate of climb 1,700 fpm/518 mpm
HIGE 10,400 ft/3,170 m **HOGE** 6,000 ft/1,827 m
Service ceiling 12,400 ft/3,776 m **S/E service ceiling** N/A
Std fuel 215 gal/814 lit **Max fuel** 395 gal/1,495 lit
Max range std fuel (no reserve) 313 nm/580 km @ 5,000 ft (1,523 m)
Range with opt fuel 592 nm/1,095 km @ 5,000 ft (1,523 m)
VFR Crew 1 **Passengers** 14
Standard avionics One VHF comm, ICS panel
1985 base price ($ U.S.) N/A
For more information contact Jim Hamilton (817) 280-8200

Manufacturer/Model Bell Helicopter Textron 222
Total production (all variants) 100 + **First flight** 1976
Comments No longer in production. Nine passenger configuration available. Power-limited HIGE—8,000 ft (2,436 m) external load gross weight is 8,100 lbs (3,673 kg). Single, dual pilot IFR options available.
Engine(s) (2) Lycoming LTS101-650C-3 **HP (takeoff)** 620 shp ea.
Dimensions main rotor 39.75 ft/12.1 m **Tail rotor** 6.5 ft/1.98 m
Height 11.25 ft/3.4 m **Length** 47.5 ft/14.5 m **Width** 11.3 ft/3.44 m
Empty weight 4,889 lbs/2,217 kg **Gross weight** 7,850 lbs/3,560 kg
Useful load 2,961 lbs/1,343 kg **External** 2,500 lbs/761 kg
Vne 150 kts/278 kmh **Max cruise** 148 kts/274 kmh
Max rate of climb 1,580 fpm/481 mpm
HIGE 4,200 ft/1,279 m **HOGE** 4,600 ft/1,401 m
Service ceiling 12,800 ft/3,898 m **S/E service ceiling** 5,200 ft/1,583 m
Std fuel 187,5 gal/710 lit **Max fuel** 300.5 gal/1,137 lit
Max range std fuel (no reserve) 350 nm/648 km @ 4,000 ft (1,218 m)
Range with opt fuel 586 nm/1,086 km @ 4,000 ft (1,218 m)
VFR Crew 1 **Passengers** 7
Standard avionics One VHF comm, ICS panel
1986 base price ($ U.S.) N/A
For more information contact Jim Hamilton (817) 280-8200



Manufacturer/Model Bell Helicopter Textron 222B
Total production (all variants) 100 + **First flight** 1982
Comments Nine passenger configuration available. Power-limited HIGE = 10,400 ft (3,167 m). Wheel gear, external load gross weight is 8,400 lbs (3,810 kg). Single-pilot IFR certification w/out augmentation.
Engine(s) (2) Lycoming LTS101-750C-1 **HP (takeoff)** 684 shp ea.
Dimensions main rotor 42 ft/12.8 m **Tail rotor** 6.88 ft/2.1 m
Height 11.25 ft/3.43 m **Length** 50 ft/15.2 m **Width** 10.25 ft/3.12 m
Empty weight 4,900 lbs/2,222 kg **Gross weight** 8,250 lbs/3,742 kg
Useful load 3,350 lbs/1,519 kg **External** 2,800 lbs/1,270 kg
Vne 150 kts/278 kmh **Max cruise** 149 kts/276 kmh
Max rate of climb 1,460 fpm/445 mpm
HIGE 7,100 ft/2,162 m **HOGE** 6,400 ft/1,951 m
Service ceiling 15,800 ft/4,811 m **S/E service ceiling** 7,500 ft/2,284 m
Std fuel 187.5 gal/710 lit **Max fuel** 300.5 gal/1,175 lit
Max range std fuel (no reserve) 324 nm/600 km @ 4,000 ft (1,218 m)
Range with opt fuel 532 nm/985 km @ 4,000 ft (1,218 m)
VFR Crew 1 **Passengers** 9
Standard avionics One VHF comm, ICS panel
1986 base price ($ U.S.) Not available at this time
For more information contact Jim Hamilton (817) 280-8200

Manufacturer/Model Bell Helicopter Textron JetRanger-III 206B-III
Total production (all variants) 3700 + **First flight** 1977
Comments Vne is 130 kts @ 3,000 lbs and below. External load gross weight is 3,350 lbs.
Engine(s) (1) Allison 250-C20J **HP (takeoff)** 420 shp
Dimensions main rotor 33.33 ft/10.16 m **Tail rotor** 5.42 ft/1.65 m
Height 9.54 ft/2.91 m **Length** 38.79 ft/11.82 m **Width** 6.4 ft/1.95 m
Empty weight 1,635 lbs/742 kg **Gross weight** 3,200 lbs/1,451 kg
Useful load 1,565 lbs/710 kg **External** 1,500 lbs/680 kg
Vne 122 kts/226 kmh **Max cruise** 118 kts/218 kmh
Max rate of climb 1,280 fpm/390 mpm
HIGE 12,800 ft/3,900 m **HOGE** 8,800 ft/2,680 m
Service ceiling 13,500 ft/4,115 m **S/E service ceiling** N/A
Std fuel 91 gal/344 lit **Max fuel** 91 gal/344 lit
Max range std fuel (no reserve) 398 nm/747 km @ 5,000 ft (1,523 m)
Range with opt fuel N/A
VFR Crew 1 **Passengers** 4
Standard avionics None. Optional factory installed avionics available.
1986 base price ($ U.S.) Not available at thist time.
For more information contact Jim Hamilton (817) 280-8200

Manufacturer/Model Bell Helicopter Textron LongRanger II 206L-1
Total production (all variants) 700 + **First flight** 1977
Comments No longer in production. External load gross weight is 4,250 lbs (1,927 kg). Single-pilot IFR option available.
Engine(s) (1) Allison 250-C28B **HP (takeoff)** 500 shp
Dimensions main rotor 37 ft/11.3 m **Tail rotor** 5.42 ft/1.65 m
Height 10.3 ft/3.1 m **Length** 42.7 ft/13.0 m **Width** 7.7 ft/2.34 m
Empty weight 2,200 lbs/998 kg **Gross weight** 4,150 lbs/1,882 kg
Useful load 1,950 lbs/884 kg **External** 2,000 lbs/907 kg
Vne 130 kts/241 kmh **Max cruise** 117 kts/215 kmh
Max rate of climb 1,340 fpm/408 mpm
HIGE 12,300 ft/3,745 m **HOGE** 5,300 ft/1,614 m
Service ceiling 19,000 ft/5,786 m **S/E service ceiling** N/A
Std fuel 98 gal/371 lit **Max fuel** 98 gal/371 lit
Max range std fuel (no reserve) 333 nm/616 km @ 5,000 ft (1,523 m)
Range with opt fuel N/A
VFR Crew 1 **Passengers** 6
Standard avionics None. Optional factory installed avionics available.
1985 base price ($ U.S.) N/A
For more information contact Jim Hamilton (817) 280-8200

Manufacturer/Model Bell Helicopter Textron 222UT
Total production (all variants) 100 + **First flight** 1983
Comments Ten-place configuration available. Power-limited HIGE = 10,400 ft (3,167 m). Skid gear. External load gross weight is 8,400 lbs (3,810 kg). Single-pilot IFR certification without augmentation.
Engine(s) (2) Lycoming LTS 101-750C-1 **HP (takeoff)** 684 shp ea.
Dimensions main rotor 42 ft/12.80 m **Tail rotor** 6.88 ft/2.1 m
Height 10.42 ft/3.06 m**Length** 50 ft/15.2 m **Width** 10.25 ft/3.12 m
Empty weight 4,874 lbs/2,210 kg **Gross weight** 8,250 lbs/3,742 kg
Useful load 3,376 lbs/1,531 kg **External** 2,800 lbs/1,270 kg
Vne 150 kts/278 kmh **Max cruise** 143 kts/265 kmh
Max rate of climb 1,460 fpm/445 mpm
HIGE 7,100 ft/2,164 m **HOGE** 6,400 ft/1,951 m
Service ceiling 15,800 ft/4,811 m **S/E service ceiling** 7,500 ft/2,284 m
Std fuel 246 gal/931 lit **Max fuel** 359 gal/1,359 lit
Max range std fuel (no reserve) 412 nm/763 km @ 4,000 ft (1,218 m)
Range with opt fuel 609 nm/1,128 km @ 4,000 ft (1,218 m)
VFR Crew 1 **Passengers** 8
Standard avionics One VHF comm plus ICS panel
1986 base price ($ U.S.) Not available at this time.
For more information contact Jim Hamilton (817) 280-8200

Because we're always planning for the future, we planned the Bell 222B for today. And tomorrow.

We planned for the future when we designed the 222B, and this remarkable aircraft has emerged as the industry model of proven technology, safety and reliability.

We planned for the future when we engineered the superb stability and handling characteristics in the 222B. To date, those characteristics remain unsurpassed and have established a new level of aerodynamic excellence. In fact, the 222B is the only helicopter ever to be certified for single-pilot IFR flight without the use of an autopilot.

We planned for the future when we incorporated backup electric, hydraulic, fire detection and extinguishing systems in the 222B — all certified to stringent commercial airline standards. Cross-fed and impact-resistant fuel cells further help to endow this aircraft with the highest safety standards of any helicopter flying today.

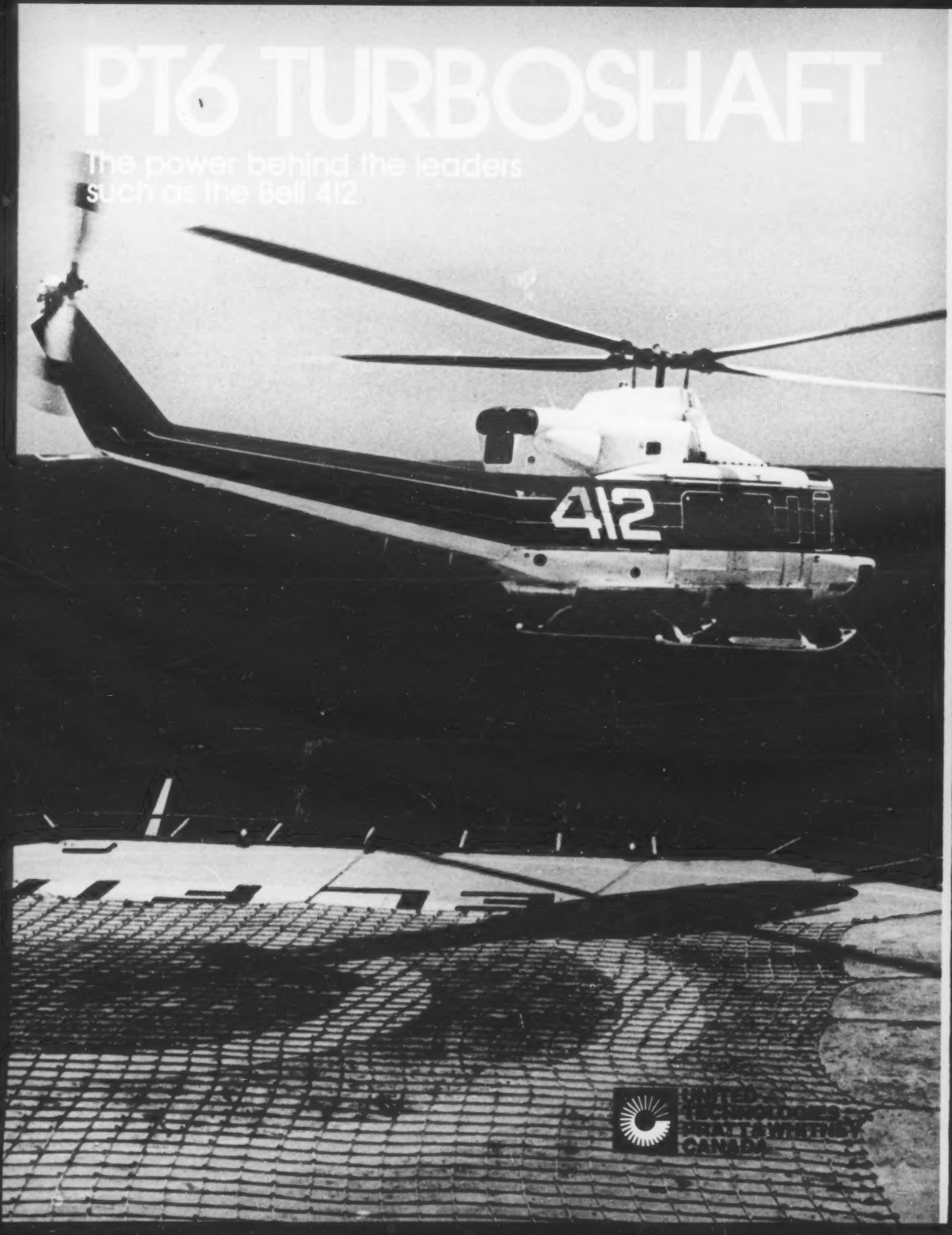
We planned for the future when we created the sleek lines, the spacious, richly appointed interiors and the hand-crafted amenities of the 222B. Just as we chose ideally matched twin Lycoming LTS 101-750C-1 turbine engines for optimum power, and incorporated our patented Noda-Matic® suspension system for the smoothest ride.

The Bell 222B is the most advanced twin engine helicopter today. We planned it that way — by design.

For more information on Bell's new or used helicopters, call or write Jim Hamilton, Vice President, Commercial Marketing, Bell Helicopter Textron Inc., Dept. 880, Box 482, Ft. Worth, Texas 76101. (817) 280-8200.

Bell Helicopter TEXTRON

The future is ours by design.


PT6 TURBOSHAFT
The power behind the leaders such as the Bell 412
412
UNITED TECHNOLOGIES
PRATT & WHITNEY CANADA

Manufacturer/Model Bell Helicopter Textron 412
Total production (all variants) 100 + **First flight** 1979
Comments AFCS standard/two-pilot and single-pilot IFR option available. Four seating types available.
Engine(s) (2) P&W PT6T-3B **HP (takeoff)** 900 shp
Dimensions main rotor 46 ft/14.02 m **Tail rotor** 8.5 ft/2.59 m
Height 15.1 ft/4.6 m **Length** 56 ft/17.05 m **Width** 9.3 ft/2.83 m
Empty weight 6,470 lbs/2,934 kg **Gross weight** 11,900 lbs/5,397 kg
Useful load 5,430 lbs/2,463 kg **External** 11,900 lbs/5,397 kg
Vne 140 kts/259 kmh **Max cruise** 124 kts/230 kmh
Max rate of climb 1,440 fpm/438 mpm
HIGE 1,400 ft/427 m **HOGE** N/A
Service ceiling 17 000 ft/5,177 m **S/E service ceiling** 7,600 ft/2,314 m
Std fuel 330 gal/1,250 liters **Max fuel** 494 gal/1,870 liters
Max range std fuel (no reserve) 402 nm/744 km @ 5,000 ft (1,528 m)
Range with opt fuel 600 nm/1,111 km @ 5,000 ft (1,528 m)
VFR Crew 1 **Passengers** 14
Standard avionics One VHF comm, ICS panel
1986 base price ($ U.S.) Quoted on request
For more information contact Jim Hamilton (817) 280-8200

Manufacturer/Model Bell Helicopter Textron LongRanger-III 206L-III
Total production (all variants) 700 + **First flight** 1981
Comments External load gross weight is 4,250 lbs. Single-pilot IFR option available. 456 shp trans. rating optionally available.
Engine(s) (1) Allison 250-C30P **HP (takeoff)** 650 shp
Dimensions main rotor 37 ft/11.3 m **Tail rotor** 5.42 ft/1.65 m
Height 10.25 ft/3.1 m **Length** 42.7 ft/10.3 m **Width** 7.7 ft/2.34 m
Empty weight 2,200 lbs/998 kg **Gross weight** 4,150 lbs/1,882 kg
Useful load 1,950 lbs/884 kg **External** 2,000 lbs/907 kg
Vne 130 kts/241 kmh **Max cruise** 116 kts/215 kmh
Max rate of climb 1,340 fpm/408 mpm
HIGE 16,500 ft/5.024 m **HOGE** 5,400 ft/1,644 m
Service ceiling 20,000 ft/6,090 m **S/E service ceiling** N/A
Std fuel 110 gals/416 lit **Max fuel** 110 gals/416 lit
Max range std fuel (no reserve) 354 nm/655 km @ 5,000 ft (1,523 m)
Range with opt fuel N/A
VFR Crew 1 **Passengers** 6
Standard avionics None. Optional factory installed avionics available.
1986 base price ($ U.S.) Not available at this time.
For more information contact Jim Hamilton (817) 280-8200

Manufacturer/Model Bell Helicopter Textron 212
Total production (all variants) 700 + **First flight** 1970
Comments Vne increases up to 130 kts (241 kmh) as gross weight decreases. Optional IFR available.
Engine(s) (2) P&W PT6T-3B **HP (takeoff)** 900 shp ea.
Dimensions main rotor 48 ft/14.6 m **Tail rotor** 8.5 ft/2.59 m
Height 4.85 ft/4.53 m **Length** 57.25 ft/17.5 m **Width** 9.25 ft/2.8 m
Empty weight 5,972 lbs/2708 kg **Gross weight** 11,200 lbs/5,080 kg
Useful load 5,228 lbs/2,371 kg **External** 5,000 lbs/2,268 kg
Vne 100 kts/185 kmh **Max cruise** 109 kts/202 kmh
Max rate of climb 1,320 fpm/404 mpm
HIGE 11,000 ft/3,350 m **HOGE** N/A
Service ceiling 14,200 ft/4,324 m **S/E service ceiling** 5,000 ft/1,523 m
Std fuel 215 gal/814 lit **Max fuel** 395 gal/1,506 lit
Max range std fuel (no reserve) 231 nm/443 km @ 4,000 ft (1,218 m)
Range with opt fuel 428 nm/787 km @ 4,000 ft (1,218 m)
VFR Crew 1 **Passengers** 14
Standard avionics One VHF comm, ICS panel.
1986 base price ($ U.S.) Quoted on request
For more information contact Jim Hamilton (817) 280-8200

Manufacturer/Model Bell Helicopter Textron 214B/214B-1
Total production (all variants) 400 + **First flight** 1975
Comments No longer in production. External load gross weight = 16,000 lbs. 214B-1 is same helicopter with maximum internal gross weight of 12,500 lbs (5,669 kg).
Engine(s) (1) Lycoming T5508D **HP (takeoff)** 2,930 shp
Dimensions main rotor 50 ft/15.2 m **Tail rotor** 9.58 ft/3.0 m
Height 13.42 ft/4.1 m **Length** 60.42 ft/18.4 m **Width** 9.33 ft/2.9 m
Empty weight 7,655 lbs/3,472 kg **Gross weight** 13,800 lbs/6,620 kg
Useful load 6,145 lbs/2,787 kg **External** 8,000 lbs/3,628 kg
Vne 140 kts/259 kmh **Max cruise** 140 kts/259 kmh
Max rate of climb 1,910 fpm/582 mpm
HIGE 15,000 ft/4,572 m **HOGE** 10,500 ft/3,200 m
Service ceiling 16,000 ft/4,875 m **S/E service ceiling** N/A
Std fuel 204 gal/772 lit **Max fuel** 379 gal/1,434 lit
Max range std fuel (no reserve) 196 nm/363 km @ 5,000 ft (1,523 m)
Range with opt fuel 368 nm/682 km @ 5,000 ft (1,523 m)
VFR Crew 1 **Passengers** 15
Standard avionics One VHF comm, ICS panel
1985 base price ($ U.S.) N/A
For more information contact Jim Hamilton (817) 280-8200

Manufacturer/Model Bell Helicopter Textron 214ST
Total production (all variants) 35 + **First flight** 1977
Comments Vne at reduced gross weight is up to 160 knots. Standard configuration is IFR-certificated. Air data system, automated power assurance, in-flight blade-tracking.
Engine(s) (2) G.E. CT7-2A **HP (takeoff)** 1,625 shp ea.
Dimensions main rotor 52 ft/15.85 m **Tail rotor** 9.67 ft/2.94 m
Height 15.4 ft/4.7 m **Length** 62.19 ft/18.95 m **Width** 9.5 ft/2.89 m
Empty weight 9,500 lbs/4,308 kg **Gross weight** 17,500 lbs/7,937 kg
Useful load 8,000 lbs/3,628 kg **External** 8,000 lbs/3,628 kg
Vne 130 kts/241 kmh **Max cruise** 143 kts/265 kmh
Max rate of climb 1,850 fpm/563 mpm
HIGE 6,400 ft/1,949 m **HOGE** 1,000 ft/305 m
Service ceiling 10,000 ft/3,045 m **S/E service ceiling** 4,800 ft/1,462 m
Std fuel 435 gal/1,646 lit **Max fuel** 609 gal/2,305 lit
Max range std fuel (no reserve) 457 nm/847 km @ 4,000 ft (1,218 m)
Range with opt fuel 657 nm/1,216 km @ 4,000 ft (1,218 m)
VFR Crew 2 **Passengers** 18
Standard avionics Dual VHF comm, dual VHF NAV, RNAV, DME, transponder, ADF dual ICS panels, AFCS
1985 base price ($ U.S.) Quoted on request
For more information contact Jim Hamilton (817) 280-8200

Manufacturer/Model Boeing Model 234 Long Range (LR)
Total production (all variants) 8 **First flight** Aug. 19, 1980
Comments Airline style passenger interior includes: restroom, entertainment system, overhead bins, light refreshment galley, standup head room, gross weight is with internal load.
Engine(s) (2) Lycoming AL5512 **HP (takeoff)** 4,075 shp
Dimensions main rotor 60 ft/18.3 m **Tail rotor** N/A
Height 18.6 ft/5.7 m **Length** 99 ft/30.2 m **Width** 15.8 ft/4.8 m
Empty weight 25,900 lbs/11,748 kg **Gross weight** 48,500 lbs/22,000 kg
Useful load 22,600 lbs/10,251 kg **External** 28,000 lbs/12,700 kg
Vne 150 kts/278 kmh **Max cruise** 145 kts/269 kmh
Max rate of climb 1,645 fpm/501 mpm
HIGE 8,500 ft/2,590 m **HOGE** 2,700 ft/823 m @ 48,500 lbs.
Service ceiling 8,500 ft/2,590 m **S/E service ceiling** 1,400 ft/427 m @ 48,500 lbs.
Std fuel 2,100 gal/7,948 lit **Max fuel** See 234 ER
Max range std fuel (no reserve) 720 nm/1,160 km
Range with opt fuel See 234 ER
VFR Crew 3 **Passengers** 44
Standard avionics None. Optional factory installed avionics available.
1985 base price ($ U.S.) Furnished upon request
For more information contact Marketing Dept. (215) 522-3357

Manufacturer/Model Boeing Model 234 Utility (UT)
Total production (all variants) 0 **First flight** June 24, 1981
Comments Utility version optimized for external load work. Can also carry cargo/passengers internally. Gross weight is with external load.
Engine(s) (2) Lycoming AL5512 **HP (takeoff)** 4,075 shp
Dimensions main rotor 60 ft/18.3 m **Tail rotor** N/A
Height 18.6 ft/5.7 m **Length** 99 ft/30.2 m **Width** 15.7 ft/4.8 m
Empty weight 21,600 lbs/9,818 kg **Gross weight** 51,000 lbs/23,134 kg
Useful load 29,400 lbs/13,364 kg **External** 28,000 lbs/12,700 kg
Vne 140 kts/259 kmh **Max cruise** 140 kts/259 kmh
Max rate of climb 2,170 fpm/661 mpm
HIGE 13,400 ft/4,083 m **HOGE** 11,500 ft/3,504 m
Service ceiling 13,400 ft/4,083 m **S/E service ceiling** 4,675 ft/1,425 m
Std fuel 978 gal/3,702 lit **Max fuel** N/A
Max range std fuel (no reserve) 330 nm/531 km
Range with opt fuel N/A
VFR Crew 2 **Passengers** N/A
Standard avionics None. Optional factory installed avionics available.
1985 base price ($ U.S.) Furnished upon request
For more information contact Marketing Dept. (215) 522-3357

Manufacturer/Model Boeing Model 234 ER (Extended Range)
Total production (all variants) 2 **First flight** March 29, 1983
Comments Two additional cabin fuel tanks increases fuel capacity to 3,078 gal. One tank with 32 seats or two tanks with 17 seats. Retains LR.
Engine(s) (2) Lycoming AL5512 **HP (takeoff)** 4,075 shp
Dimensions main rotor 60 ft/18.3 m **Tail rotor** N/A
Height 18.6 ft/5.7 m **Length** 99 ft/30.2 m **Width** 15.7 ft/4.8 m
Empty weight 26,500 lbs/11,476 kg **Gross weight** 48,500 lbs/22,000 kg
Useful load 22,000 lbs/9,979 kg **External** 28,000 lbs/12,700 kg
Vne 150 kts/278 kmh **Max cruise** 145 kts/269 kmh
Max rate of climb 1,645 fpm/501 mpm
HIGE 8,500 ft/2,590 m **HOGE** 2,700 ft/823 m @ 48,500 lbs.
Service ceiling 8,500 ft/2,590 m **S/E service ceiling** 1,400 ft/427 m @ 48,500 lbs.
Std fuel 3,078 gal/11,650 lit **Max fuel** N/A
Max range std fuel (no reserve) 1,136 nm/1,827 km
Range with opt fuel N/A
VFR Crew 2/3 **Passengers** 17 with 2 interior fuel tanks, 32 with 1 interior fuel tanks.
Standard avionics None. Optional factory installed avionics available.
1985 base price ($ U.S.) Furnished upon request
For more information contact Marketing Dept. (215) 522-3375

Manufacturer/Model Boeing Model 234 Multipurpose Long Range (MLR)
Total production (all variants) 3 **First flight** March 21, 1985
Comments Multipurpose LR is designed for internal/external loads with minimal passenger amenities for 44 passengers.
Engine(s) (2) Lycoming AL5512 **HP(takeoff)** 4,075 shp
Dimensions main rotor 60 ft/18.3 m **Tail rotor** N/A
Height 18.6 ft/5.7 m **Length** 99 ft/30.2 m **Width** 15.7 ft/4.8 m
Empty weight 24,500 lbs/11,100 kg **Gross weight** 48,500 lbs/22,000 kg
Useful Load 22,400 lbs/10,160 kg **External** 28,000 lbs/12,700 kg
Vne 140 kts/259 kmh **Max cruise** 145 kts/269 kmh
Max rate of climb 1,645 fpm/501 mpm
HIGE 8,500 ft/2,590 m **HOGE** 2,700 ft/823 m @ 48,500 lbs.
Service ceiling 8,500 ft/2,590 m **S/E service ceiling** 1,400 ft/427 m @ 48,500 lbs.
Std fuel 3,078 gal/11,650 lit **Max fuel** See 234 ER
Max range std fuel (no reserve) 720 nm/1,160 km
Range with opt fuel See 234 ER
VFR Crew 2 **Passengers** 44
Standard avionics None. Optional factory installed avionics available.
1985 base price ($ U.S.) Furnished upon request
For more information contact Marketing Dept. (215) 522-3357

Manufacturer/Model California Helicopter International S58T
Total production (all variants) 2300 + **First flight** 1954 (S58) 1970 (S58T)
Comments Available with PT6T-3 or PT6T-6 engines. Information shown is for -6 version.
Engine(s) (2) P&W PT6T-6 Twin Pac **HP (takeoff)** 1,875 shp
Dimensions main rotor 56 ft/17.07 m **Tail rotor** 9.5 ft/2.90 m
Height 15.92 ft/4.5 m **Length** 50.92 ft/15.32 m **Width** 5.66 ft/1.73 m
Empty weight 7,577 lbs/3,436 kg **Gross weight** 13,000 lbs/5,896 kg
Useful load 5,423 lbs/2,460 kg **External** 5,000 lbs/2,250 kg
Vne 117 kts/216 kmh **Max cruise** 110 kts/204 kmh
Max rate of climb 1,220 fpm/372 mpm
HIGE 10,400 ft/3,170 m **HOGE** 6,500 ft/1,981 m
Service ceiling 12,800 ft/3,901 m **S/E service ceiling** 4,300 ft/1,311 m
Std fuel 283 gal/1,071 lit **Max fuel** 433 gal/1,645 lit
Max range std fuel (no reserve) 280 nm/518 km
Range with opt fuel 420 nm/777 km
VFR Crew 1 **Passengers** 18
Standard avionics VHF20, ADF60, VOR, VIR 31
1985 base price ($ U.S.) Furnished upon request.
For more information contact California Helicopter (818) 767-2032

The California Helicopter
Sikorsky S-58T
We keep 'em flying with ...

Worldwide Service, Support, Parts and Component Overhaul.

Available New, Remanufactured & Used

- *PASSENGERS*
- *FREIGHT*
- *UTILITY*
- *HEAVY LIFT*

CALIFORNIA HELICOPTER INTERNATIONAL

11601 Pendleton Street, Sun Valley, California 91352
Telephone: (818) 767-2032 Telex: 67-7331 CALHELICO SNVY

Manufacturer/Model E.H. Industries, Ltd./EH 101
Total production (all variants) Under development **First flight** Due 1986
Comments Joint development/production between Westland Helicopters, Ltd. and Costruzioni Aeronautiche Giovanni Agusta Spa.
Engine(s) (3) GE CT7/6A **HP (takeoff)** 2,000 shp
Dimensions main rotor 61 ft/18.59 m **Tail rotor** 13.13 ft/4.0 m
Height 17.6 ft/5.35 m **Length** 64 ft/19.5 m **Width** 14.25 ft/4.34 m
Empty weight 19,052 lb/8,642 kg **Gross weight** 31,500 lb/14,288 kg
Useful load 12,448 lb/5,642 kg **External** 15,000 lb/6,804 kg
Vne 167 kts/309 kph **Max cruise** 150 kts/277 kmh
Max rate of climb 2,200 fpm/670 mpm
HIGE 8,250 ft/2,515 m **HOGE** 3,500 ft/1,067 m
Service ceiling 15,000 ft/4,572 m **S/E service ceiling** 12,900 ft/3,932 m
Std fuel 348 gal/1,318 lit **Max fuel** 454 gal/1,719 lit
Max range std fuel (no reserve) 690 nm/1,277 km
Range with opt fuel 830 nm/1,537 km
VFR Crew 3 **Passengers** 30
Standard avionics 4-axis automatic flight control system plus full EFIS cockpit.
1985 base price ($ U.S.) TBA
For more information contact John K. Snelling (0935) 75222 ext. 3558

Manufacturer/Model Enstrom Helicopter Corporation Model F-28F
Total production (all variants) 40 **First flight** Nov. 4, 1980
Comments Enstrom's emphasis on product support and the operator's needs is reflected in the 225 hp "F" series, which provides 2,350 lb gross weight HIGE capabilities on an ISA + 30° day at 9,400 ft.
Engine(s) (1) Lycoming HIO-360-F1ADw/Rayjayturbo **HP (takeoff)** 225 hp
Dimensions main rotor 32 ft/9.75 m **Tail rotor** 4.78 ft/1.45 m
Height 9 ft/2.74 m **Length** 29.3 ft/8.9 m **Width** 7.5 ft/2.29 m
Empty weight 1,550 lbs/703 kg **Gross weight** 2,600 lbs/1,180 kg
Useful load 1,050 lbs/476 kg **External** 1,000 lbs/453.6 kg
Vne 97 kts/180 kmh (SL to 915 m) **Max cruise** 97 kts/180 kmh
Max rate of climb 1,450 fpm/440 mpm
HIGE 13,200 ft/4,023 m **HOGE** 8,700 ft/2,650 m @ 2,300 lb, HIGE 7,800 ft/2,375 m @ 2,600 lb
Service ceiling 12,000 ft/3,650 m (max. op. alt.) **S/E service ceiling** N/A
Std fuel 40 gal/151 lit **Max fuel** 52.7 gal/200 lit
Max range std fuel (no reserve) 228 nm/423 km
Range with opt fuel 313 nm/580 km
VFR Crew 1 **Passengers** 2
Standard avionics None. Optional factory installed avionics available.
1985 base price ($ U.S.) $154,900
For more information contact Paul L. Shultz (906) 863-9971

Manufacturer/Model Enstrom Helicopter Corporation Model 280F
Total production (all variants) 15 **First flight** Nov. 4, 1980
Comments The Enstrom 280F, 225 hp "Shark" is keeping pace with the executive's needs by increasing the maximum cruise speed by 7 knots.
Engine(s) (1)LycomingHIO-360-F1ADw/Rayjayturbo **HP(takeoff)** 225 hp
Dimensions main rotor 32 ft/9.75 m **Tail rotor** 4.78 ft/1.45 m
Height 9 ft/2.74 m **Length** 27.7 ft/8.4 m **Width** 7.5 ft/2.29 m
Empty weight 1,550 lbs/703 kg **Gross weight** 2,600 lbs/1,880 kg
Useful load 1,050 lbs/476 kg **External** 1,000 lbs/453.6 kg
Vne 102 kts/188 kmh (SL to 915 m) **Max cruise** 102 kts/188 kmh
Max rate of climb 1,450 fpm/440 mpm
HIGE 13,200 ft/4,023 m **HOGE** 8,700 ft/2,652 m @ 2,350 lb, HIGE 7,800 ft/2,375 m @ 2,600 lb.
Service ceiling 12,000 ft/3,650 m (max. op. alt.) **S/E service ceiling** N/A
Std fuel 40 gal/151 lit **Max fuel** 52.7 gal/200 lit
Max range std fuel (no reserve) 241 nm/446 km
Range with opt fuel 318 nm/589 km
VFR Crew 1 **Passengers** 2
Standard avionics None. Factory installed avionics available.
1985 base price ($ U.S.) $159,400
For more information contact Paul L. Shultz (906) 863-9971

Manufacturer/Model Enstrom Helicopter Corporation Model 280FX
Total production (all variants) 6 **First flight** 1984
Comments T.C. Jan. 1985. Basic 280 series with new stabilizers, landing gear fairings, tail rotor driveshaft cover, restyled air inlet system, tail rotor guard.
Engine(s) (1)TurboLycomingHIO-360-F1AD **HP(takeoff)** 225 hp
Dimensions main rotor 32.0 ft/9.75 m **Tail rotor** 4.8 ft/1.46 m
Height 9.3 ft/2.83 m **Length** 27.8 ft/8.45 m **Width** 7.5 ft/2.29 m
Empty weight 1,570 lbs/711 kg **Gross weight** 2600 lbs/1180 kg
Useful load 1,030 lbs/466 kg **External** 1,000 lbs/453 kg
Vne 117 kts/216 kmh **Max cruise** 117 kts/216 kmh
Max rate of climb 1,450 fpm/440 mpm
HIGE 13,200 ft/4,023 m **HOGE** 8,700 ft/TBA ft/2,650 m
Service ceiling 12,000 ft/3,650 m (max. op. alt.) **S/E service ceiling** N/A
Std fuel 42 gal/159 lit **Max fuel** N/A
Max range std fuel (no reserve) 300 nm/556 km
Range with opt fuel N/A
VFR Crew 1 **Passengers** 2
Standard avionics Com KY 197, Transponder KT76A, Loran C-Model 611
1985 base price ($ U.S.) $174,900
For more information contact Paul L. Shultz (906) 863-9971

The most exciting helicopter in the world can't fly...

[illegible] fixed-wing aircraft.

EH101

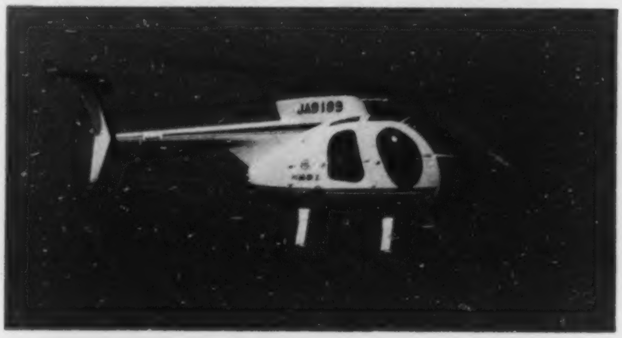
[illegible]

Agusta S.p.A.
[illegible]

Westland Helicopters Ltd
[illegible]

Manufacturer/Model Rogerson Hiller Corporation UH12E
Total production (all variants) 1000 + **First flight** 1958
Comments
Engine(s) (1) Lycoming VO 540-C2A **HP (takeoff)** 340 shp
Dimensions main rotor 35.40 ft/10.78m **Tail rotor** 5.50 ft/1.67 m
Height 10.08 ft/3.07 m **Length** 28.5 ft/8.68 m **Width** 4.9 ft/1.5 m
Empty weight 1,759 lbs/797.87 kg **Gross weight** 3,100 lbs/1406.14 kg
Useful load 1,341 lbs/608.27 kg **External** 1,000 lbs/453.59 kg
Vne 96 kts/177.79 kmh **Max cruise** 78 kts/144.46 kmh
Max rate of climb 1,290 fpm/193.19 mpm
HIGE 10,400 ft/3,169.92 m **HOGE** 6,800 ft/2,072.64 m
Service ceiling 15,000 ft/4,572 m **S/E service ceiling** N/A
Std fuel 46 gal/174.13 lit **Max fuel** 86 gal/325.55 lit
Max range std fuel (no reserve) 210 nm/389 km
Range with opt fuel 405 nm/750 km
VFR Crew 1 **Passengers** 2
Standard avionics None. Optional factory installed avionics available.
1985 base price ($ U.S.) N/A
For more information contact Victor Milner (714)660-0666

Manufacturer/Model Rogerson Hiller Corporation RH1100C
Total production (all variants) 250 **First flight** 1962
Comments
Engine(s) (1) Allison 250-C20B **HP (takeoff)** 420 shp
Dimensions main rotor 35.41 ft/10.79 m **Tail rotor** 6 ft/1.83 m
Height 9.08 ft/2.77 m **Length** 28.37 ft/8.65 m **Width** 4.34 ft/1.32 m
Empty weight 1,500 lbs/680.39 kg **Gross weight** 2,850 lbs/1,292.74 kg
Useful load 1,335 lbs/604.75 kg **External** 1,250 lbs/566.99 kg
Vne 127 kts/235.2 kmh **Max cruise** 127 kts/235.2 kmh
Max rate of climb 1,600 fpm/487.68 mpm
HIGE 17,000 ft/5,181.60 m **HOGE** 12,000 ft/3,657.6 m
Service ceiling 17,300 ft/5,273 m **S/E service ceiling** N/A
Std fuel 68.5 gal/259.30 lit **Max fuel** 108.5 gal/410.72 lit
Max range std fuel (no reserve) 390 nm/739 km
Range with opt fuel 635 nm/1,176 km
VFR Crew 1 **Passengers** 4
Standard avionics None. Optional factory installed avionics available.
1985 base price ($ U.S.) N/A
For more information contact Victor Milner (714)660-0666



Manufacturer/Model Kawasaki Heavy Industries, Ltd./Kawasaki-Hughes H500 series
Total production (all variants) 306 **First flight** 1967
Comments Manufactured under license from Hughes Helicopter. A light weight high performance 5 seat helicopter.
Engine(s) (1) D.D. Allison 250-C20B (D model) **HP (takeoff)** 420 shp
Dimensions main rotor 26.42 ft/8.05 m **Tail rotor** 4.58 ft/1.40 m
Height 8.94 ft/2.72 m **Length** 30.5 ft/9.30 m **Width** 6.79 ft/2.07 m
Empty weight 1,369 lbs/621 kg **Gross weight** 3,000 lbs/1,361 kg
Useful load 1,631 lbs/740 kg **External** 2,181 lbs/989 kg
Vne 152 kts/282 kmh **Max cruise** 139 kts/258 kmh
Max rate of climb 1,875 fpm/572 mpm
HIGE 8,500 ft/2,591 m **HOGE** 7,400 ft/2,256 m
Service ceiling 14,700 ft/4,481 m **S/E service ceiling** N/A
Std fuel 64 gal/242 lit **Max fuel** N/A
Max range std fuel (no reserve) 260 nm/481 km
Range with opt fuel N/A
VFR Crew 1 **Passengers** 4
Standard avionics None. Optional factory installed avionics available.
1985 base price ($ U.S.) N/A
For more information contact Keishiro Tanaka (03) 435-2495

Manufacturer/Model Kawasaki Heavy Industries, Ltd./Kawasaki BK117
Total production (all variants) 6 **First flight** 1979
Comments A true multi-purpose light-twin helicopter jointly developed by Kawasaki and MBB of West Germany. Safety, reliability and versatility are the prime design objectives.
Engine(s) (2) Avco-Lycoming LTS101-650B-1 **HP (takeoff)** 550 shp ea.
Dimensions main rotor 36.09 ft/11 m **Tail rotor** 6.29 ft/1.92 m
Height 11.02 ft/3.36 m **Length** 42.58 ft/12.98 m **Width** 8.86 ft/2.70 m
Empty weight 3,627 lbs/1,645 kg **Gross weight** 6,284 lbs/2,850 kg
Useful load 2,657 lbs/1,205 kg **External** 2,988 lbs/1,355 kg
Vne 150 kts/278 kmh **Max cruise** 144 kts/267 kmh (8,000 ft)
Max rate of climb 1,920 fpm/585 mpm
HIGE 6,600 ft/2,010 m **HOGE** 8,400 ft/2,560 m
Service ceiling 15,000 ft/4,572 m **S/E service ceiling** 8,800 ft/2,680 m
Std fuel 156 gal/590 lit **Max fuel** 236 gal/900 lit
Max range std fuel (no reserve) 270 nm/500 km (at 124 kts/230 kmh, S/L)
Range with opt fuel 410 nm/760 km, S/L
VFR Crew 1 **Passengers** 10
Standard avionics One VHF (Collins VHF-250)
1985 base price ($ U.S.) N/A
For more information contact Keishiro Tanaka (03) 435-2495

Manufacturer/Model Kawasaki Heavy Industries, Ltd./Kawasaki Bell 47/G3B-KH4
Total production (all variants) 439 **First flight** 1961 (KH4)
Comments Manufactured under the license from Bell Helicopter. KH4 was a modified version of 47G3B to accommodate one crew and three passengers, and the best seller in Japan.
Engine(s) (1) Avco-Lycoming TV0-435 **HP (takeoff)** 260 hp
Dimensions main rotor 37.13 ft/11.32 m **Tail rotor** 5.84 ft/1.78 m
Height 9.3 ft/2.84 m **Length** 43.63 ft/13.3 m **Width** 9.46 ft/2.88 m
Empty weight 1,850 lbs/839 kg **Gross weight** 2,850 lbs/1,293 kg
Useful load 1,000 lbs/454 kg **External** 1,000 lbs/454 kg
Vne 91 kts/168 kmh **Max cruise** 75 kts/139 kmh (5,000 ft)
Max rate of climb 850 fpm/259 mpm
HIGE 18,000 ft/5,486 m **HOGE** 15,000 ft/4,572 m
Service ceiling 18,500 ft/5,639 m **S/E service ceiling** N/A
Std fuel 53 gal/201 lit **Max fuel** N/A
Max range std fuel (no reserve) 214 nm/397 km (5,000 ft)
Range with opt fuel N/A
VFR Crew 1 **Passengers** 3
Standard avionics None.
1985 base price ($ U.S.) Out of production
For more information contact Keishiro Tanaka (03) 435-2495

Manufacturer/Model Kawasaki-Boeing KV107IIA
Total production (all variants) 143 **First flight** April 1962
Comments Kawasaki-built KV107's are operated by the Japan Self-Defense Forces, Tokyo Police, Airlift Corp., (Japan), Columbia Helicopters, (U.S.), the Royal Swedish Navy, & the Ministry of Interior, Saudi Arabia.
Engine(s) (2) CT58-140-1 or CT58-IHI-140-1 **HP (takeoff)** 1,400 hp
Dimensions main rotor 50 ft/15.24 m **Tail rotor** N/A
Height 16.10 ft/5.13 m **Length** 83.4 ft/25.40 m **Width** 14.6 ft/4.42 m
Empty weight 11,570 lbs/5,248 kg **Gross weight** 19,000 lbs/8,618 kg
Useful load 7,430 lbs/3,370 kg **External** 7,430 lbs/3,370 kg
Vne 146 kts/270 kmh **Max cruise** 135 kt/250 kmh
Max rate of climb 2,000 fpm/610 mpm
HIGE 12,000 ft/3,810 m **HOGE** 9,000 ft/2,743 m
Service ceiling 18,000 ft/5,486 m **S/E service ceiling** 5,700 ft/1,740 m
Std fuel 350 gal/1,325 lit **Max fuel** N/A
Max range std fuel (no reserve) 238 nm/441 km
Range with opt fuel N/A
VFR Crew 3 **Passengers** 25
Standard avionics ADF, Gyro compass, transponder, VHF, ICS, SAS AST
1985 base price ($ U.S.) $7,500,000
For additional information contact International Sales (03) 435-2461, Telex: 242-4371

Fitz-Wright...
getting to know us could save your life.

The Fitz-Wright "Aviator" Helicopter Suit has been designed to provide maximal thermal protection and minimal buoyancy for helicopter crews and their passengers. This suit is currently being used by some of the largest Offshore Oil companies. The suit provides a high level of comfort, mobility and dexterity during routine use and excels in the water. The Fitz-Wright "Aviator" Helicopter Suit is a fully protective waterproof and fire retardant garment with thermal protection provided by an integrated two liner undergarment system to meet severe environmental conditions. Each suit comes complete with detachable neoprene hood and gloves to afford the wearer greater flexibility and manual dexterity. In addition an integrated FAA approved life jacket is incorporated with the suit.

FITZWRIGHT
FITZ-WRIGHT SUITS LTD.
17919 Roan Place, Surrey, B.C., Canada V3S 5K1
Phone: (604) 576-9424 Telex: 04-54208 Faxcom: (604) 576-6114

Manufacturer/Model Messerschmitt-Boelkow-Blohm GmbH BO 105 CB
Total production (all variants) 1,200 **First flight** 1975
Comments World's first light, twin-engine helicopter for commercial use. Proven successful in executive transport, utility, offshore, police, military and EMS use.
Engine(s) (2) Allison 250-C20B **HP (takeoff)** 420 shp
Dimensions main rotor 32.35 ft/9.84 m **Tail rotor** 6.17 ft/1.9 m
Height 9.08 ft/3 m **Length** 38.09 ft/11.8 m **Width** 8.35 ft/2.53 m
Empty weight 2,780 lbs/1,261 kg **Gross weight** 5,291 lbs/2,400 kg*
Useful load 2,511 lbs/1,139 kg **External** 1,984 lbs/900 kg
Vne 145 kts/270 kmh **Max cruise** 131 kts/242 kmh
Max rate of climb 1,476 fpm/450 mpm
HIGE 7,600 ft/2,030 m **HOGE** 5,300 ft/1,620 m
Service ceiling 17,000 ft/5,180 m **S/E service ceiling** 2,920 ft/890 m
Std fuel 151.3 gal/572.9 lit **Max fuel** 256.7 gal/969 lit
Max range std fuel (no reserve) 310 nm/575 km
Range with opt fuel 540 nm/1,000 km
VFR Crew 1 **Passengers** 4
Standard avionics None. Optional factory installed avionics available.
1985 base price ($ U.S.) Furnished upon request
For more information contact Louis P. Bartolotta (215) 431-4150, Ext. 311

Manufacturer/Model Messerschmitt-Boelkow-Blohm GmbH BO 105 CBS
Total production (all variants) 1,200 **First flight** N/A
Comments BO 105 CBS incorporates a stretched fuselage cabin area, totalling 130 cubic feet of continuous space with access from sides and rear. Optional gross wt. of 5,512 lbs. available.
Engine(s) (2) Allison 250-C20B **HP (takeoff)** 420 shp
Dimensions main rotor 32.35 ft/9.84 m **Tail rotor** 6.17 ft/1.9 m
Height 9.08 ft/3 m **Length** 38.09 ft/11.8 m **Width** 8.35 ft/2.53 m
Empty weight 2,780 lbs/1,261 kg **Gross weight** 5,291 lbs/2,400 kg
Useful load 2,511 lbs/1,139 kg **External** 1,984 lbs/900 kg
Vne 145 kts/270 kmh **Max cruise** 131 kts/242 kmh
Max rate of climb 1,476 fpm/450 mpm
HIGE 7,600 ft/2,303 m **HOGE** 5,300 ft/1,620 m
Service ceiling 17,000 ft/5,180 m **S/E service ceiling** 2,920 ft/890 m
Std fuel 151.3 gal/572.9 lit **Max fuel** 256.7 gal/969 lit
Max range std fuel (no reserve) 310 nm/575 km
Range with opt fuel 540 nm/1,000 km
VFR Crew 1 **Passengers** 5
Standard avionics None. Optional factory installed avionics available.
1985 base price ($ U.S.) Furnished upon request.
For more information contact Louis P. Bartolotta (215) 431-4150, Ext. 311

Manufacturer/Model Messerschmitt-Boelkow-Blohm GmbH BO105LS
Total production (all variants) N/A **First flight** N/A
Comments Designed especially for "hot" and "high" operating environments and external lifting applications. *Max. combined gross mass of helicopter (2,400 kg) and cargo hook load is 2,600 kg—200 kg must be jettisonable.
Engine(s) (2) Allison 250-C28C **HP (takeoff)** 550 shp
Dimensions main rotor 32.35 ft/9.84 m **Tail rotor** 6.17 ft/1.9 m
Height 9.08 ft/3.0 m **Length** 38.09 ft/11.8 m **Width** 8.35 ft/2.53 m
Empty weight 2,932 lbs/1,330 kg **Gross weight** 5,291 lbs/2,400 kg
Useful load 2,359 lbs/1,070 kg **External** 2,720 lbs/2,636 kg
Vne 145 kts/269 kmh **Max cruise** 132 kts/244 kmh
Max rate of climb 1,820 fpm/555 mpm
HIGE 12,360 ft/3,850 m **HOGE** 10,830 ft/3,300 m
Service ceiling 20,000 ft/6,100 m **S/E service ceiling** 9,646 ft/2,940 m
Std fuel 150 gal/567.8 lit **Max fuel** N/A
Max range std fuel (no reserve) 290 nm/536 km
Range with opt fuel N/A
VFR Crew 1 **Passengers** 5
Standard avionics None. Optional factory installed avionics available.
1985 base price ($ U.S.) Furnished upon request
For more information contact Louis P. Bartolotta (215) 431-4150, Ext. 311

Manufacturer/Model Messerschmitt-Boelkow-Blohm GmbH BK 117 A-3
Total production (all variants) 70 **First flight** N/A
Comments Medium twin-engine, multi-purpose helicopter with 200 cubic feet of continuous cabin space, accessible from sides or rear. Employs proven BO 105 advanced technology.
Engine(s) (2) Lycoming LTS-101-650 B1 **HP (takeoff)** 550 shp ea.
Dimensions main rotor 36.09 ft/11 m **Tail rotor** 6.29 ft/1.92 m
Height 11.02 ft/3.36 m **Length** 32.74 ft/9.98 m **Width** 8.17 ft/2.5 m
Empty weight 3,638 lbs/1,650 kg **Gross weight** 7,056 lbs/3,207 kg
Useful load 3,417 lbs/1,557 kg **External** N/A
Vne 150 kts/278 kmh **Max cruise** 136 kts/251 kmh
Max rate of climb 1,950 fpm/594 mpm
HIGE 9,850 ft/3,000 m **HOGE** 8,200 ft/2,500 m
Service ceiling 15,000 ft/4,572 m **S/E service ceiling** 8,695 ft/2,650 m
Std fuel 160 gal/608 lit **Max fuel** 289 gal/1,093 lit
Max range std fuel (no reserve) 270 nm/500 km
Range with opt fuel 505 nm/735 km
VFR Crew 1 **Passengers** 9
Standard avionics None. Optional factory installed avionics available.
1985 base price ($ U.S.) Furnished upon request
For more information contact Louis P. Bartolotta (215) 431-4150, Ext. 311

BK 117 Space Ship and BO 105 Twin Jet II. The first and foremost in twin-turbine helicopters.

From the company that pioneered and proved the light twin concept. Over a decade of operational experience well past the 1,000,000 flight-hour mark.

With a dependable hingeless rotor system no one has been able to surpass. Never a blade or hub failure. Not one.

The most usable space, the biggest payload of their class, access from side and rear doors. More versatility.

Now working worldwide. Offshore. Medevac. Corporate. Utility. TV news. Cargo. Exploration. Defense.

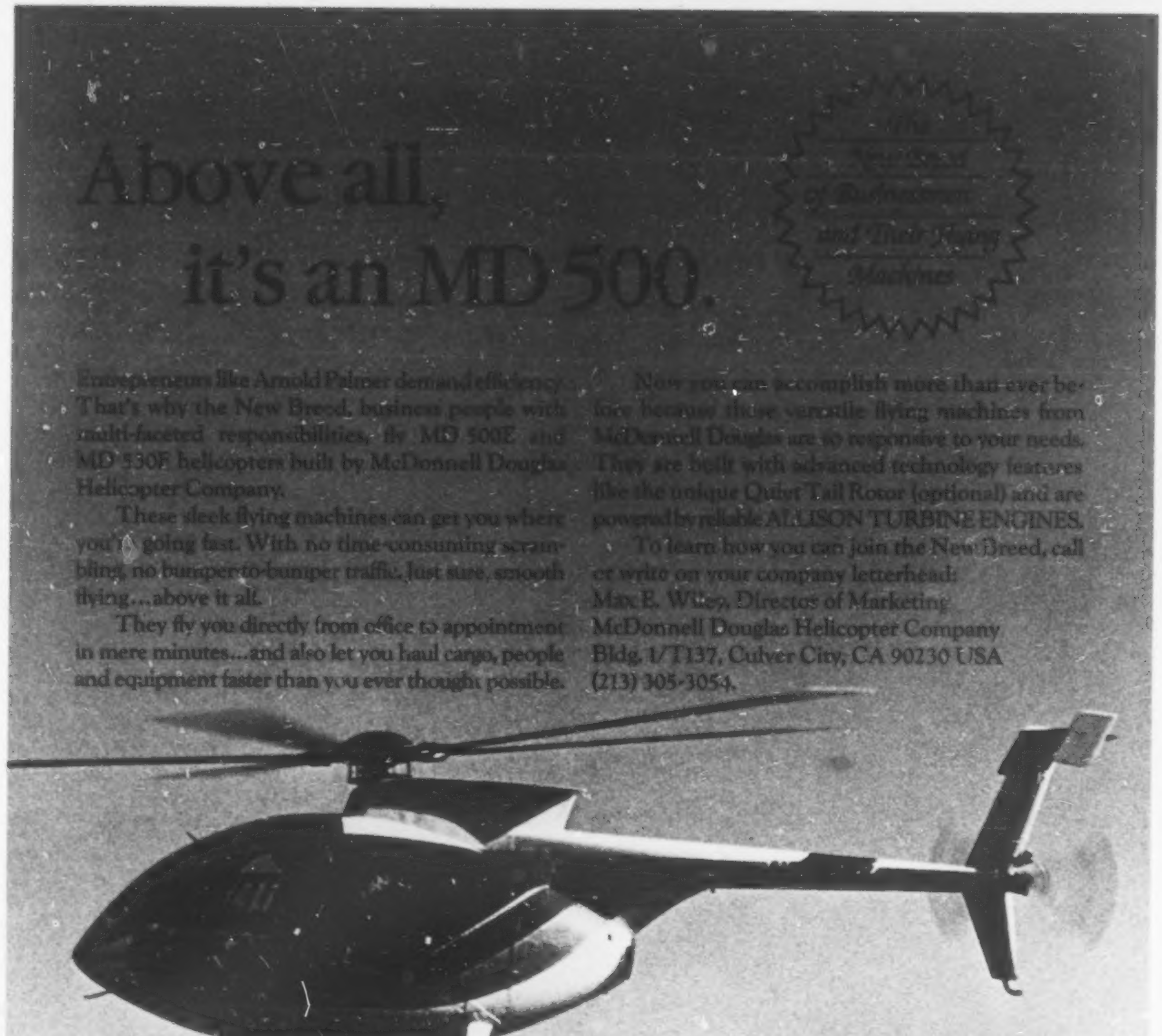
The world's most reliable and most economical twins. The MBB family of Twin Jet helicopters.

MBB Helicopter Corporation
900 Airport Road
P.O. Box 2349
West Chester, PA 19380
Telephone: (215) 431-4150
Telex: 902041

Messerschmitt-Bölkow-Blohm GmbH
Helicopter and Transport Division
Postfach 80 11 40
D-8000 Muenchen 80, Germany

MBB

MBB HELICOPTER CORPORATION. A subsidiary of Messerschmitt-Bölkow-Blohm GmbH.



Above all, it's an MD 500.

The
New Breed
of Businessmen
and Their Flying
Machines

Entrepreneurs like Arnold Palmer demand efficiency. That's why the New Breed, business people with multi-faceted responsibilities, fly MD 500E and MD 530F helicopters built by McDonnell Douglas Helicopter Company.

These sleek flying machines can get you where you're going fast. With no time-consuming scrambling, no bumper-to-bumper traffic. Just sure, smooth flying…above it all.

They fly you directly from office to appointment in mere minutes…and also let you haul cargo, people and equipment faster than you ever thought possible.

Now you can accomplish more than ever before because these versatile flying machines from McDonnell Douglas are so responsive to your needs. They are built with advanced technology features like the unique Quiet Tail Rotor (optional) and are powered by reliable ALLISON TURBINE ENGINES.

To learn how you can join the New Breed, call or write on your company letterhead:

Max E. Wiley, Director of Marketing
McDonnell Douglas Helicopter Company
Bldg. 1/T137, Culver City, CA 90230 USA
(213) 305-3054.

Arnold Palmer

Arnold Palmer Talks About Business Flying

"When you're in business and constantly on the go, you need a helicopter that performs like a champion. My MD 500 is ready to go when I am, takes me all over the map and back—fast."

MCDONNELL DOUGLAS

Manufacturer/Model McDonnell Douglas Helicopter Company Model 500E
Total production (all variants) 3,668 **First flight** 1982
Comments The 500E is the latest version of the Model 500 series which began in 1962 with the US Army OH-6A. It incorporates important changes in comfort and styling recommended by the customer.
Engine(s) (1) Allison 250-C20B **HP (takeoff)** 420 shp
Dimensions main rotor 26.35 ft/8.03 m **Tail rotor** 4.58 ft/1.4 m
Height 9.18 ft/2.8 m **Length** 30.8 ft/9.4 m **Width** 6.07 ft/1.85 m
Empty weight 1,455 lbs/660 kg **Gross weight** 3,000 lbs/1,361 kg
Useful load 1,545 lbs/700 kg **External** 2,000 lbs/950 kg
Vne 152 kts/282 kmh **Max cruise** 139 kts/258 kmh
Max rate of climb 1,900 fpm/579 mpm
HIGE 8,500 ft/2,591 m **HOGE** 7,400 ft/2,255 m
Service ceiling 14,700 ft/4,481 m **S/E service ceiling** N/A
Std fuel 64 gal/242 lit **Max fuel** 115 gal/435 lit
Max range std fuel (no reserve) 287 nm/532 km (5,000 ft)
Range with opt fuel 533 nm/988 km (5,000 ft)
VFR Crew 1 **Passengers** 4
Standard avionics None. Optional factory installed avionics available.
1985 base price ($ U.S.) $395,000
For more information contact Max E. Wiley (213) 305-3054

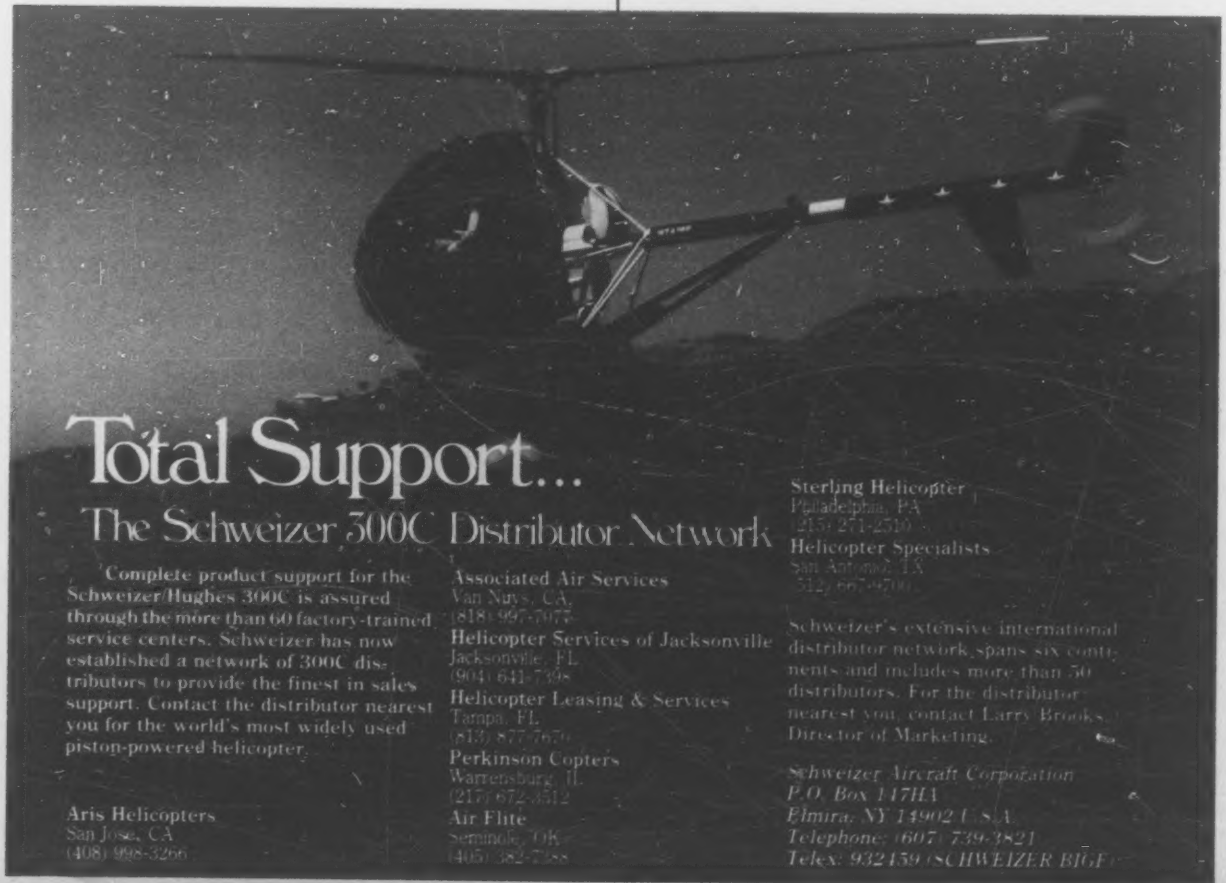
Manufacturer/Model McDonnell Douglas Helicopter Company Model 530F
Total production (all variants) 20 **First flight** 1982
Comments Hot day/high altitude version of Model 500 series. Incorporates all features of 500E plus larger rotors, high gross weight.
Engine(s) (1) Allison 250-C30 **HP (takeoff)** 650 shp
Dimensions main rotor 27.4 ft/8.4 m **Tail rotor** 4.75 ft/1.45 m
Height 9.18 ft/2.8 m **Length** 32.06 ft/9.77 m. **Width** 6.07 ft/1.85 m
Empty weight 1,585 lbs/719 kg **Gross weight** 3,100 lbs/1,406 kg
Useful load 1,515 lbs/687 kg **External** 2,000 lbs/1,610 kg
Vne 152 kts/282 kmh **Max cruise** 135 kts/250 kmh
Max rate of climb 1,540 fpm/469 mpm
HIGE 14,200 ft/4,328 m **HOGE** 12,000 ft/3,658 m
Service ceiling 16,000 ft/4,877 m **S/E service ceiling** N/A
Std fuel 64 gal/242 lit **Max fuel** 115 gal/435 lit
Max range std fuel (no reserve) 239 m/443 km (5,000 ft)
Range with opt fuel 448 nm/830 km (5,000 ft)
VFR Crew 1 **Passengers** 4
Standard avionics None. Optional factory installed avionics available.
1985 base price ($ U.S.) $515,000
For more information contact Max E. Wiley (213) 305-3054

Manufacturer/Model Robinson R22 Beta
Total production (all variants) 550 **First flight** 1975
Comments Top selling piston helicopter used for powerline patrol, flight training, herding, TV & feature filming, traffic watch, photography, law enforcement, construction & oil industry support, executive & personal transport.
Engine(s) (1) Lycoming 0-320-B2C **HP (takeoff)** 160 hp derated to 131 hp
Dimensions main rotor 25.2 ft/7.7 m **Tail rotor** 3.5 ft/1.1 m
Height 8.75 ft/2.7 m **Length** 28.75 ft/8.8 m **Width** 6.33 ft/1.9 m
Empty weight 824 lbs/374 kg **Gross weight** 1,370 lbs/621 kg
Useful load 546 lbs/248 kg **External** None
Vne 102 kts/189 kmh **Max cruise** 96 kts/178 kmh
Max rate of climb 1,000 fpm/305 mpm
HIGE 6,970 ft/2,124 m **HOGE** 5,200 ft
Service ceiling 14,000 ft/4,267 m **S/E service ceiling** N/A
Std fuel 19.2 gal/72.7 lit **Max fuel** 29.7 gal
Max range std fuel (no reserve) 209 nm/386.3 km
Range with opt fuel 323 nm/598.2 km
VFR Crew 1 **Passengers** 1
Standard avionics King KY 197 COMM transceiver with intercom
1985 base price ($ U.S.) $85,850 includes dual controls, rotor brake, night lights and rate-of-climb
For more information contact Barbara Krauss (213) 539-0508

Manufacturer/Model Schweizer Aircraft Corp. Hughes Model 300C
Total production (all variants) 2,700 + **First flight** 1971
Comments The 300C is the latest version of the Model 300 series which began in 1956 and is being built by Schweizer Aircraft (a Hughes licensee) in Elmira, New York.
Engine(s) (1) Lycoming HIO-360-D1A **HP (takeoff)** 190 hp
Dimensions main rotor 26.84 ft/8.18 m **Tail rotor** 4.25 ft/1.30 m
Height 8.75 ft/2.67 m **Length** 22.2 ft/6.76 m **Width** 6.54 ft/1.99 m
Empty weight 1,100 lbs/499 kg **Gross weight** 2,050 lbs/930 kg
Useful load 950 lbs/431 kg **External** 1,050 lbs/476 kg
Vne 91 kts/169 kmh **Max cruise** 83 kts/154 kmh (4,000 ft)
Max rate of climb 750 fpm/229 mpm at gross weight
HIGE 6,000 ft/1,829 m **HOGE** 2,700 ft/823 m
Service ceiling 10,200 ft/3,109 m **S/E service ceiling** N/A
Std fuel 30 gal/113 lit **Max fuel** 49 gal/185 lit
Max range std fuel (no reserve) 230 nm/426 km (4,000 ft)
Range with opt fuel 376 nm/6f97 km (4,000 ft)
VFR Crew 1 **Passengers** 2
Standard avionics None. Optional factory installed avionics available.
1985 base price ($ U.S.) $136,000
For more information contact Larry A. Brooks (607) 739-3821

Manufacturer/Model Sikorsky S-76A Mark II
Total production (all variants) 275 **First flight** 1977
Comments
Engine(s) (2) Allison 250 C30S **HP (takeoff)** 650 shp ea.
Dimensions main rotor 44 ft/13.41 m **Tail rotor** 8 ft/2.44 m
Height 11.79 ft/3.58 m **Length** 43.33 ft/13.21 m **Width** 10 ft/3.05 m
Empty weight 5,930 lbs/2,689 kg **Gross weight** 10,500 lbs/4,763 kg
Useful load 4,570 lbs/2,073 kg **External** 3,300 lbs/1,497 kg
Vne 155 kts/287 kph **Max cruise** 145 kts/268 kph
Max rate of climb 1,325 fpm/404 mpm
HIGE 2,500 ft/762 m **HOGE** 1,100 ft/335 m
Service ceiling 15,000 ft/4,572 m **S/E service ceiling** 4,500 ft/1,372 m
Std fuel 281 gal/1,064 lit **Max fuel** 387 gal/1,463 lit
Max range std fuel (no reserve) 455 nm/843 km @ 128 kt.
Range with opt fuel 644 nm/1,193 km @ 128 kt.
VFR Crew 1 **Passengers** 13
Standard avionics Collins VHF
1985 base price ($ U.S.) $2,550,000
For more information contact Frank Hunter (203) 386-7600

Manufacturer/Model Sikorsky S-70C
Total production (all variants) 700 **First flight** 1978
Comments Commercial variant of the H-60 "HAWK" Series
Engine(s) (2) G.E. CT7-2C **HP (takeoff)** 1,565 hp
Dimensions main rotor 53.9 ft/16.4 m **Tail rotor** 11 ft/3.4 m
Height 16.8 ft/5.1 m **Length** 50.1 ft/15.3 m **Width** 7.8 ft/2.4 m
Empty weight 10,158 lbs/4,608 kg **Gross weight**
Design 16,825 lbs/7,623 kg Max 22,000 lbs/9,979 kg
Useful load 11,842 lbs/5,371 kg **External** 8,000 lbs/3,629 kg
Vne 193 kts/358 kph **Max cruise** 162 kts/300 kph
Max rate of climb 2,770 fpm/844 mpm
HIGE 14,200 ft/4,329 m **HOGE** 9,950 ft/3,033 m
Service ceiling 19,000 ft/5,971 m **S/E service ceiling** 10,100 ft/3,079 m
Std fuel 362 gal/1,370 lit **Max fuel** 362 gal/1,370 lit
Max range std fuel (no reserve) 350 nm/648 km @ 145 kts/269 kmh
Range with opt fuel N/A
VFR Crew 2 **Passengers** 19
Standard avionics AFCS including attitude and airspeed hold
1985 base price ($ U.S.) Furnished upon request
For more information contact Frank Hunter (203) 386-7600



Total Support...
The Schweizer 300C Distributor Network

Complete product support for the Schweizer/Hughes 300C is assured through the more than 60 factory-trained service centers. Schweizer has now established a network of 300C distributors to provide the finest in sales support. Contact the distributor nearest you for the world's most widely used piston-powered helicopter.

Aris Helicopters
San Jose, CA
(408) 998-3266

Associated Air Services
Van Nuys, CA
(818) 997-7977
Helicopter Services of Jacksonville
Jacksonville, FL
(904) 641-7398
Helicopter Leasing & Services
Tampa, FL
(813) 877-7670
Perkinson Copters
Warrensburg, IL
(217) 672-3512
Air Flite
Seminole, OK
(405) 382-7388

Sterling Helicopter
Philadelphia, PA
(215) 271-2510
Helicopter Specialists
San Antonio, TX
(512) 667-9700

Schweizer's extensive international distributor network spans six continents and includes more than 50 distributors. For the distributor nearest you, contact Larry Brooks, Director of Marketing.

Schweizer Aircraft Corporation
P.O. Box 147HA
Elmira, NY 14902 U.S.A.
Telephone: (607) 739-3821
Telex: 932459 (SCHWEIZER BIGF)

Manufacturer/Model Sikorsky S-76B
Total production (all variants) 275 **First flight** June 1984
Comments Enhanced hot and high performance over S76A Mark II.
Engine(s) (2) Pratt & Whitney Canada PT6B-36 **HP (takeoff)** 960 shp ea.
Dimensions main rotor 44 ft/13.41 m **Tail rotor** 8 ft/2.44 m
Height 11.79 ft/3.58 m **Length** 43.33 ft/13.21 m **Width** 10 ft/3.05 m
Empty weight 6,548 lbs/2,970 kg **Gross weight** 11,400 lbs/5,171 kg
Useful load 4,852 lbs/2,201 kg **External** 3,300 lbs/1,497 kg
Vne 155 kts/287 kph **Max cruise** 145 kts/268 kph
Max rate of climb 1,500 fpm/456 mpm
HIGE 8,300 ft/2,530 m **HOGE** 5,400 ft/1,646 m
Service ceiling 15,500 ft/4,724 m **S/E service ceiling** 8,000 ft/2,438 m
Std fuel 281 gal/1,064 lit **Max fuel** 336 gal/1,272 lit
Max range std fuel (no reserve) 400 nm/741 km @ 130 kt.
Range with opt fuel 468 nm/867 km @ 130 kt.
VFR Crew 1 **Passengers** 13
Standard avionics Collins VHF
1985 base price ($ U.S.) $2,920,000
For more information contact Frank Hunter (203) 386-7600

Manufacturer/Model Soloy Conversions, Soloy-Hiller UH12E
Total production (all variants) 185 **First flight** 1974
Comments Conversions for the Hiller UH12D and E models to turbine power. Combines features of Hiller with the Allison 250-C20B powerplant providing significant performance benefits.
Engine(s) (1) Allison 250-C20B **HP (takeoff)** 305 shp
Dimensions main rotor 35.33 ft/10.77 m **Tail rotor** 5.55 ft/1.69 m
Height 10.08 ft/3.07 m **Length** 28.42 ft/8.66 m **Width** 4.9 ft/1.5 m
Empty weight 1,650 lbs/748 kg **Gross weight** 3,100 lbs/1,406 kg
Useful load 1,450 lbs/658 kg **External** 1,200 lbs/544 kg
Vne 84 kts/155.57 kmh **Max cruise** 78 kts/144.46 kmh
Max rate of climb 1,706 fpm/420 mpm
HIGE 11,300 ft/3,444 m **HOGE** 8,700 ft/2,642 m
Service ceiling 14,000 ft/4267 m **S/E service ceiling** N/A
Std fuel 46 gal/174.13 lit **Max fuel** 86 gal/325.55 lit
Max range std fuel (no reserve) 159 nm/255 km
Range with opt fuel 274 nm/507 km
VFR Crew 1 **Passengers** 2
Standard avionics To customer specifications.
1985 base price ($ U.S.) Furnished upon request.
For more information contact Randy Furtick, Marketing Group Manager. Tim Koester. Sales Manager. (206) 754-7000

Manufacturer/Model Soloy Conversions,/Soloy-Hiller UH12E4
Total production (all variants) 12 **First flight** 1974
Comments Conversions for the Hiller UH12D and E models to turbine power. Combines features of Hiller with the Allison 250-C20B powerplant providing significant performance benefits.
Engine(s) (1) Allison 250-C20B **HP (takeoff)** 305 shp
Dimensions main rotor 35.33 ft/10.77 m **Tail rotor** 5.55 ft/1.69 m
Height 10.08 ft/3.07 m **Length** 28.9 ft/8.8 m **Width** 4.9 ft/1.5 m
Empty weight 1,650 lbs/748 kg **Gross weight** 3,100 lbs/1,406 kg
Useful load 1,450 lbs/658 kg **External** 1,200 lbs/544 kg
Vne 84 kts/155.57 kmh **Max cruise** 78 kts/144.46 kmh
Max rate of climb 1,463 fpm/466 mpm
HIGE 11,300 ft/3,444 m **HOGE** 8,700 ft/2,652 m
Service ceiling 14,000 ft/4267 m **S/E service ceiling** N/A
Std fuel 46 gal/174.13 lit **Max fuel** 86 gal/325.55 lit
Max range std fuel (no reserve) 159 nm/255 km
Range with opt fuel 274 nm/507 km
VFR Crew 1 **Passengers** 3
Standard avionics To customer specifications.
1985 base price ($ U.S.) Furnished upon request.
For more information contact Randy Furtick, Marketing Group Manager, Tim Koester, Sales Manager. (206) 754-7000

Manufacturer/Model Soloy Conversions, Soloy/Bell 47 (600 Series)
Total production (all variants) 160 **First flight** 1976
Comments Eleven models of the Bell 47G are convertible on Type Certificate 2H3. The conversion allows operators the benefits of turbine power at a reasonable cost. Data for 600 series shown.
Engine(s) (1) Allison 250-C20B **HP (takeoff)** 265 shp
Dimensions main rotor 35.1 ft/10.5 m **Tail rotor** 5.10 ft/1.75 m
Height 9.3 ft/2.78 m **Length** 43.2 ft/12.96 m **Width** 7.5 ft/2.28 m
Empty weight 1,570 lbs/705.5 kg **Gross weight** 2,950 lbs/1,327.5 kg
Useful load 1,380 lbs/621 kg **External** 1,200 lbs/540 kg
Vne 91.5 kts/169 kmh **Max cruise** 91.5 kts/169 kmh
Max rate of climb 1,250 fpm/375 mpm
HIGE 16,000 ft/4,877 m **HOGE** 14,000 ft/4,267 m
Service ceiling 16,000 ft/4,877 m **S/E service ceiling** N/A
Std fuel 57.5 gal/218.5 lit **Max fuel** 97.5 gal/369 lit
Max range std fuel (no reserve) 230 nm/426 km
Range with opt fuel 410 nm/759 km
VFR Crew 1 **Passengers** 2
Standard avionics To customer specification.
1985 base price ($ U.S.) Furnished upon request
For more information contact Randy Furtick, Marketing Group Manager, Tim Koester, Sales Manager (206) 754-7000

Manufacturer/Model Soloy Conversions, Soloy/Bell 47 (900 series)
Total production (all variants) 23 **First flight** 1976
Comments Eleven models of the Bell 47G are convertible on Type Certificate 2H3. The conversion allows operators the benefits of turbine power at a reasonable cost. Data for 900 series shown.
Engine(s) (1) Allison 250-C20B **HP (takeoff)** 275 shp
Dimensions main rotor 35.1 ft/10.5 m **Tail rotor** 5.10 ft/1.75 m
Height 9.3 ft/2.78 m **Length** 43.2 ft/12.96 m **Width** 7.5 ft/2.28 m
Empty weight 1,570 lbs/705.5 kg **Gross weight** 3,200 lbs/1,440 kg
Useful load 1,630 lbs/733.5 kg **External** 1,200 lbs/540 kg
Vne 91.5 kts/169 kmh **Max cruise** 91.5 kts/169 kmh
Max rate of climb 1,250 fpm/375 mpm
HIGE 16,000 ft/4,877 m **HOGE** 14,600 ft/4,450 m
Service ceiling 16,000 ft/4,877 m**S/E service ceiling** N/A
Std fuel 57.5 gal/218.5 lit **Max fuel** 97.5 gal/369 lit
Max range std fuel (no reserve) 230 nm/426 km
Range with opt fuel 410 nm/759 km
VFR Crew 1 **Passengers** 2
Standard avionics to customer specification.
1985 base price ($ U.S.) Furnished upon request
For more information contact Randy Furtick, Marketing Group Manager; Tim Koester, Sales Manager (206) 754-7000

Manufacturer/Model Westland Helicopters Ltd./Westland 30 Series 100-60
Total production (all variants) 22 (W-30) **First flight** 1979
Comments The Westland 30 is a large-bodied variant of the successful proven inservice Lynx multirole helicopter, of which over 300 aircraft have been produced.
Engine(s) (2) Rolls Royce Gem 60 **HP (takeoff)** 1,180 shp
Dimensions main rotor 43.67 ft/13.31 m **Tail rotor** 8 ft/2.44 m
Height 15.5 ft/4.72 m **Length** 46.67 ft/14.23 m **Width** 10.17 ft/3.1 m
Empty weight 7,348 lb/3,333 kg **Gross weight** 12,800 lb/5,806 kg
Useful load 5,452 lb/2,473 kg **External** 4,500 lb/2,042 kg
Vne 133 kts/246 kmh **Max cruise** 120 kts/222 kmh
Max rate of climb 2,050 fpm/624.6 mpm
HIGE 2,600 ft/792 m **HOGE** 2,300 ft/701 m
Service ceiling 12,500 ft/3,810 m **S/E service ceiling** 4,300 ft/1,310 m
Std fuel 348 gal/1,318 lit **Max fuel** 552 gal/2,090 lit
Max range std fuel (no reserve) 360 nm/667 km
Range with opt fuel 505 nm/935 km
VFR Crew 2 **Passengers** 17-19
Standard avionics Autopilot and 4-axis autostabilization, plus avionics to customer specification
1985 base price ($ U.S.) $2,300,000
For more information contact John K. Snelling (0935) 75222 ext. 3558

Manufacturer/Model Westland Helicopters Ltd./Westland 30 Series 200
Total production (all variants) 22 (W-30) **First flight** 1983
Comments The Westland 30 Series 200 is fitted with GE CT7 engines giving high installed power for operation in hot climates, and to provide single engine safety.
Engine(s) (2) GE CT7-2B **HP (takeoff)** 1,615 shp
Dimensions main rotor 43.67 ft/13.31 m **Tail rotor** 8 ft/2.44 m
Height 15.5 ft/4.72 m **Length** 46.67 ft/14.23 m **Width** 10.17 ft/3.1 m
Empty weight 7,912 lb/3,589 kg **Gross weight** 12,800 lb/5,806 kg
Useful load 4,888 lb/2,217 kg **External** 4,500 lb/2,042 kg
Vne 133 kts/246 kmh **Max cruise** 120 kts/222 kmh
Max rate of climb 2,400 fpm/731.4 mpm
HIGE 2,600 ft/792 m **HOGE** 2,600 ft/792 m
Service ceiling 12,500 ft/3,810 m **S/E service ceiling** 11,000 ft/3,352 m
Std fuel 348 gal/1,318 lit **Max fuel** 552 gal/2,090 lit
Max range std fuel (no reserve) 320 nm/593 km
Range with opt fuel 480 nm/889 km
VFR Crew 2 **Passengers** 17-19
Standard avionics Autopilot and 4-axis autostabilization, plus avionics to customer specification.
1985 base price ($ U.S.) $2,700,000
For more information contact John K. Snelling (0935) 75222 ext. 3558

Manufacturer/Model Westland Helicopters Ltd./Westland 30 Series 300
Total production (all variants) 22 (W-30) **First flight** Due Jan. 1986
Comments Uprated variant of the Westland 30 Series 200 with a new rotor and transmission system and airframe modification, resulting in improved payload-range and higher cruise speed.
Engine(s) (2) GE CT7-6A **HP (takeoff)** 2,000 shp
Dimensions main rotor 42.51 ft/12.96 m **Tail rotor** 9 ft/2.74 m
Height 16.32 ft/4.98 m **Length** 46.67 ft/14.23 m **Width** 10.17 ft/3.1 m
Empty weight 9,564 lb/4,338 kg **Gross weight** 16,000 lb/7,528 kg
Useful load 6,436 lb/2,919 kg **External** 6,000 lb/2,722 kg
Vne 171 kts/317 kph **Max cruise** 150 kts/278 kph
Max rate of climb 2,000 fpm/610 mpm
HIGE 6,300 ft/1,920 m **HOGE** 4,150 ft/1,265 m
Service ceiling 12,500 ft/3,810 m **S/E service ceiling** 11,000 ft/3,352 m
Std fuel 341 gal/1,290 lit **Max fuel** 521 gal/1,972 lit
Max range std fuel (no reserve) 290 nm/537 km
Range with opt fuel 400 nm/741 km
VFR Crew 2 **Passengers** 17-19
Standard avionics Autopilot and 4-axis autostabilization; EFIS and integrated fit of basic digital avionics
1985 base price ($ U.S.) TBA
For more information contact John K. Snelling (0935) 75222 ext. 3558

WE'VE INCREASED THE VOLUME BUT TURNED DOWN THE SOUND.

We all know the problems with helicopters.

There's not enough space and far too much sound. Especially in the medium sized helicopters we use for flying executives around and ferrying oilmen out to the rigs.

All of which was true enough until along came the Westland 30.

The Westland 30 was designed, quite simply, with people in mind.

People intelligent enough to want to hear themselves think. People who want to be treated like passengers, not contortionists.

In fact, the Westland 30 was designed to give the largest possible number of passengers the maximum amount of space with the minimum possible discomfort.

And it succeeds. Brilliantly.

The 460 cu. ft. cabin can carry up to 17 people in the kind of luxury you'd normally associate with a Boeing 737. Equally it can be adapted to accommodate 6 to 10 people in the kind of style to which any of us would like to become accustomed.

It can carry freight. It can carry casualties. And it can carry them all with a quietness and comfort unusual in this class of helicopter.

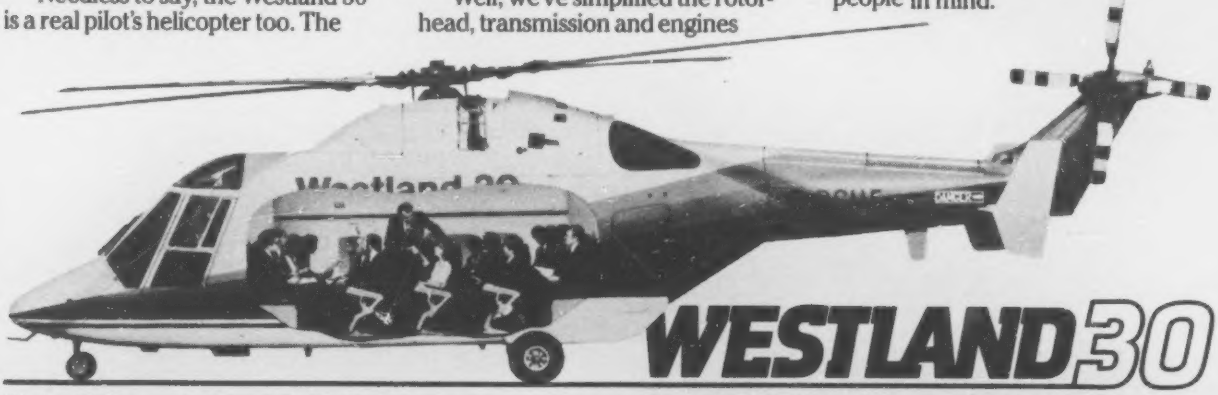
Needless to say, the Westland 30 is a real pilot's helicopter too. The unusually spacious cockpit has all round visibility as well as comprehensive IFR instrumentation and an advanced navigation system which lets the pilot get on with the job of flying.

So much for the versatility in the air. But how does the Westland 30 perform on the ground?

Well, we've simplified the rotorhead, transmission and engines for ease of maintenance and designed them to be far more accessible to engineers carrying out routine work. So with the minimum of fuss, the Westland 30 gets back up in the air. Where it belongs.

The Westland 30. Designed for space. Designed for comfort.

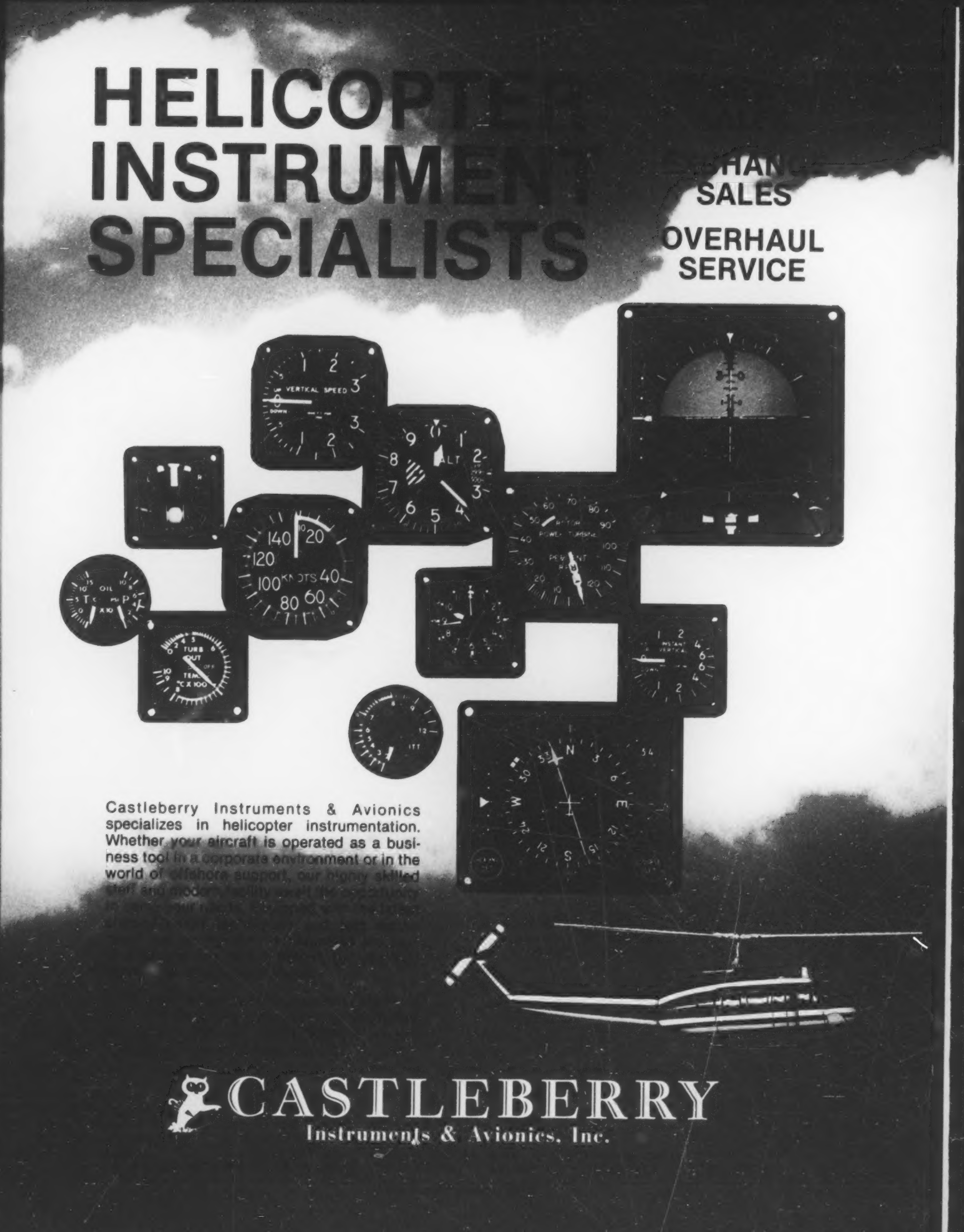
And designed with people in mind.



WESTLAND 30

Designed with people in mind.

Westland Helicopters Ltd. Yeovil, England BA20 2YB.



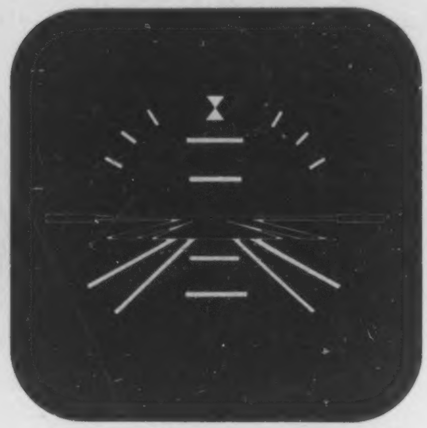
HELICOPTER INSTRUMENT SPECIALISTS

EXCHANGE SALES

OVERHAUL SERVICE

Castleberry Instruments & Avionics specializes in helicopter instrumentation. Whether your aircraft is operated as a business tool in a corporate environment or in the world of offshore support, our highly skilled staff and modern facility await the opportunity to serve your needs. [illegible]

CASTLEBERRY
Instruments & Avionics, Inc.



The glass cockpit

by Keith Fritz

The marriage of sophisticated avionics to high-tech helicopters has created dazzling results

Instrument operations among helicopter operators has matured! For those who have invested in the required equipment, the time when the decision to go Special Visual Flight Rules (SVFR) or remain on the ground has faded into history. Many of us are now able to go from point to point with the ease and safety that were formerly reserved for our fixed-wing contemporaries. It was just ten years ago that rumors of IFR helicopters loomed on the horizon and we were forced to simulate IMC when giving instruction or performing proficiency checks. The FAA was hesitant to accommodate helicopter IFR, and it took some doing to have some of their key attitudes and opinions altered.

The sudden emergence of the so-called "Third Generation" ships and the pressure brought to bear by their manufacturers, was quick to get the FAA moving, and avionics manufacturers were running at full steam. In retrospect, it was a beautiful thing to see; not unlike a symphony where everyone knew their part and never missed a beat.

The marriage of these sophisticated avionics to high-tech helicopters has produced some truly dazzling pieces of machinery. We now have helicopters that are packed full of little black boxes that do everything short of buttering the toast. These boxes, in addition to doing much of our thinking for us, were suddenly able to modulate our flight controls, tabulate performance figures, program a flight and even alert us to our own failures. We even have a name for it all — "the glass cockpit." If one piece of software or a display should break down, we have the capability to call up a back-up or redundant system and put it to work in its stead.

In many respects, the mission capability of IFR helicopters began to exceed those of our fixed-wing counterparts. Consider RNAV point-in-space approaches that are specifically reserved for "helicopter only." We even have discreet IFR corridors running up and down the airspace between Washington, D.C. and Boston. The avionics required for utilizing this corridor are easily installed and pay for themselves in a big hurry when one considers what it costs in time and operating costs to fly conventional airways and approaches in the world's busiest airspace. In fact, RNAV and LORAN-C are considered standard equipment in most IFR helicopters. When coupled with LORAN-C's repeatable accuracy and "down-to-the-surface" capability, the RNAV pilot and machine become more than the sum of their parts. Indeed, we are much further down the road than many anticipated we would be. The all-glass cockpits are right around the corner for many of us, and the intelligent, cost-conscious business helicopter owner, buyer and pilot need to watch these developments very carefully.

The avionics manufacturers are obsolescing each others' equipment so rapidly that it often takes something just short of a night course in data processing to understand what they're selling. Terms like "user-friendly" and "software interfacing" are becoming as commonplace as cyclic and collective. I've known for years that engineers love to use doubletalk; it actually gets to be fun to listen to them speak in their native tongue. If you don't believe it, just listen to them at their booth displays at the HAI exhibits — it's just like a Berlitz short course. They do, however, have our best interests at heart. Armed with their silicon chips and dual digital this-and-thats, they are seeking to provide the users with the greatest amount of information in the simplest format for the lowest cost. They have already outpaced the industry in mission capability and flexibility, and we owe them a great deal for making our jobs not only easier, but more enjoyable.

The irony of it all, however, is that the FAA is not ready to accept all of this increased ability. The committees and tests that were established to accommodate it are just now leaving the starting gate. As a result, we are seeing FAA regions trying to grapple with the problem on their own. The East Coast Plan is one such study that is underway and is attempting to realign existing victor and jet airways to expedite the flow of air traffic and even allow dedicated airspace for helicopters. To make these efforts effective, a rapid response is needed from all of us to implement more fully our new abilities. The people who write the TERPS need to realize that our capabilities must not be restricted by the narrow requirements of fixed-wing logic. It's pointless to have visibility and altitude minimums so restrictive that our unique capabilities become wasted efforts.

The FAA, particularly the TERPS Committee, must realize that we have far greater capabilities than our fixed-wing counterparts. For example, we don't need 5000-foot runways and fixed-wing LDPs; we shouldn't have to shoot circling approaches or need to be vectored three miles out from a final approach fix. We're quite capable of shooting a "slam-dunk" approach within one-fourth to one-half mile from an FAF and can conveniently modulate our approach speeds to accommodate ATC. Perhaps the TERPS people should be thinking about special aircrew/aircraft certification for helicopters. We have category II & IIA approaches for fixed-wing crews and aircraft...why not decreased minimums for helicopters and crews that have demonstrated ability to accommodate lower minimums?

We are in a unique position not only to tell the FAA what we want, but we have the backing of the entire industry to inform and even demonstrate what our new capabilities are. The FAA is anxious to know what we want, and it seeks to incorporate our ideas into programs, like the East Coast Plan. Let's not be silent on the matter. The FAA, avionics and helicopter manufacturers are all ready to act, and we need to strike while the iron is hot!

Keith Fritz is a former R & D test pilot for the U.S. Army Aviation Research & Development Command and served as a project officer in the development of dozens of experimental navigation and detection systems. As a project director, he was responsible for the testing and evaluation of experimental flight directors, compass systems and microwave landing systems.

He is a 6000-hour ATP/CFII and currently flies an S-76 and Lear 25 for Thomson Industries of Port Washington, New York. He also serves as the IFR Committee chairman for the Eastern Region Helicopter Council and maintains currency in an FH-1100 and Grumman Widgeon which function as back-up aircraft for Thomson's aviation fleet.

Avionics manufacturers' specification guide

A comprehensive guide of data on avionics and flight control systems specifically suited to helicopters.

The avionics directory provides data on avionics and flight control systems specifically suited for use in helicopters.

The directory has equipment categories listed alphabetically within functional groupings. Prices shown are manufacturers' list, uninstalled. Prices are subject to change based on model variations or capability enhancements.

The length of warranty is shown; however, specific coverage varies and should be confirmed by the manufacturer or dealer.

For complete and current information on any units shown, please contact the manufacturer. A directory listing is provided on page 65.

Contents

Communications

Audio control panels 60
HF transceivers 63
In-flight telephones 63
VHF transceivers 63
VHF/FM mission control transceivers 65

Flight control

Autopilots 66
Flight directors 66
Integrated flight control systems 67

Electronic flight instrument systems

Display units 68
Symbol generators 68

Navigation

Area navigation systems 69
Automatic direction finders 70
Distance measuring equipment 70
Glideslope receivers 71
Horizontal situation indicators 72
Long range navigation systems 73
Marker beacon receivers 77
Radio magnetic indicators 77
VHF comm/nav transceivers 79
VHF navigation receivers 80
Thunderstorm detection 81
Weather radar 81

Other avionics

Antennas 82
Emergency locator transmitters 83
ELT locator/VHF homing receivers 84
Encoding altimeters/blind encoders 84
Radar altimeters 85
Transponders 85
Manufacturers directory 65

Communications Audio control panels

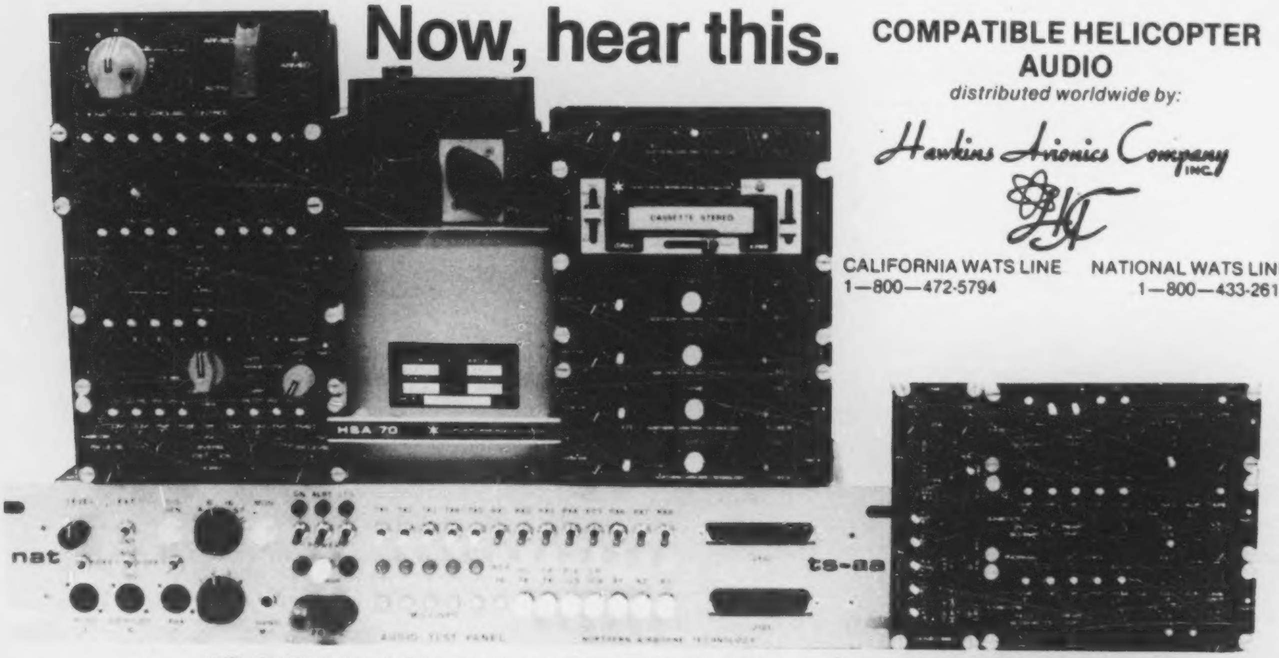
Manufacturer/Model Price	Input (VDC/amps)	Features included	Type controls	Max. inputs	Weight/Panel size (H) (W) (D)	Warranty	TSO	Remarks
Baker M1035 $2,100	27.5/2	Intercom, 8 mic sel, auto level & squelch for Rec'r inputs	Pushbutton	13	2.2/ 2.25/5.75/ 5.	2 yr	C50b	Functions customized to customer req. Toggle switches may be substituted for rec'r pushbuttons.
Baker M1045 $2,800	27.5/2	Auto audio leveling, squelch for Rec'r inputs, intercom, 10 mic sel	Pushbutton	19	2.6/ 2.62/5.75/ 5.19	2 yr	C50b	Functions customized to customer req. UK CAA approved. Fr STNA approved
Bendix ACS-45A $3,320	18-33/2	Separate speaker/phone amp, MKB, mute	Pushbutton	10	2.6/ 3/5.7/5.5	2 yr	C50c	10 audio channels plus 3 unmuted inputs. 3 cabin ICS inputs. Self contained system
Collins AUD-250 $725	14, 28*/ 1.1 (14V)	Auto mike select	Switch	7	1.5/ 1.5/6.2/4.7	1 yr	C50b	*Adapter, $75

Communications *Audio control panels (continued)*

Manufacturer/Model Price	Input (VDC/amps)	Features included	Type controls	Max. inputs	Weight/Panel size (H) (W) (D)	Warranty	TSO	Remarks
Collins **AUD-250H** **$790**	14, 28*/ 1.1 (14V)	HF mike & audio select	Switch	8	1.5/ 1.5/6.2/4.7	1 yr	C50b	For aircraft w/HF transceivers; *Adapter, $75.
Collins **AUD-251H** **$970**	14, 28*/ 1.5 (14V)	5 station intercom	Switch	8	1.5/ 1.5/6.2/4.7	1yr	C50b	Designed for use in helicopters; *Adapter, $75
Collins **AMR-350** **$985**	14, 28*/ 1.0 (14V)	MKB	Switch	7	1.8/ 1.5/6.2/4.7	1 yr	C35d, C50b	Auto mike select; *Adapter, $75
Collins **AMR-350H** **$1,140**	14, 28*/ 1.0 (14V)	MKB, HF, mike & audio select	Switch	8	1.8/ 1.5/6.2/4.7	1 yr	C35d, C50b	For aircraft w/HF transceivers; *Adapter, $75
King **KA 119** **$755**	28/0.3	5 or 28V panel lighting avail	Pushbutton	2 xmtrs, 7 rcvrs	0.9/ 2.25/5.75/ 5.15	1 yr p&l	C506	For use w/remote mounted audio amp KAA455, $2,560. Dzus rail mounted. Gray or black faceplate, HF input avail
King **KA 134** **$505**	14, 28/ 0.8 (14V) 1.3 (28V)	Audio isolation & spk amp	Pushbutton	3 xmtrs, 5 rcvrs, 3 unswitched rcvrs	0.8/ 1.2/3.3/7.75	1 yr p&l	C506	Blt-in spk audio amp "Both" button allows monitoring of the unselected xcvr. No MKB
King **KMA 24** **$990**	14, 28/1.9	Integ MKB rcvr & lites	Rotary xmit & pushbutton audio selectors	3 xcvrs, 5 add'l rcvrs, 2 unswitched	1.7/ 1.3/6.25/ 6.78	1 yr p&l	C35d, C506	Separate pushbutton for hdphn & spk selection; separate isolation amps for hdphn & spk input incl. Panel mounted
King **KMA 24H** **$1,260**	14, 28/1.6	Integ 5 station hot mike, keyed or vox intercom	Rotary intercom & xmtr & pushbutton audio selectors	5 intercom, 4 or 5 xmtrs, 5 or 6 rcvrs	1.7/ 1.3/6.25/ 6.81	1 yr p&l	C506	No MKB. Separate pushbuttons for hdphn & spk selection. Voice activated intercom
Narco **CP-136** **$850**	14, 28/ 2.25, 1.75	Intercom capability, separate phone and speaker amps	Lighted pushbutton	12 inc 4 intercom	1.8/ 1.11/6.25/ 8.27	1 yr, 2nd yr opt	C50b	Auto feature on transmit selects proper receiver
Narco **CP-136M** **$950**	14, 28 2.25, 1.75	Intercom capability, separate phone and speaker amps	Lighted pushbuttons	12 inc 4 intercom	2.0/ 1.11/6.25/ 8.27	1 yr, 2nd yr opt	C50b	Auto feature on transmit selects proper receiver
Northern Airborne **AA90** **$1,895**	28/.5	5 xcvr & PA outputs, 6 rcvr inputs, 6 sta ICS, 3 alert inputs, live or keyed ICS, PIL/OBS. Tx capab	Rotary tx sel/ toggle rx sel	13	2.0/ 1.87/5.75/9	1 yr	M.O.T. Approved	Available in single or multiple station versions. Multiple stations configured for EMS and ENG installations available.
Northern Airborne **AA92** **$2,695**	28/.5	Indep pilot/observer, 4 xcvr & PA outputs, 6 sta ICS, plug comp w/AA90, live or keyed ICS, OAS acceptable	2 rotary tx sel/ 2 toggle rx sel	12	2.0/ 1.87/5.75/9	1 yr	M.O.T. approved	The AA92 is designed for forestry and other applications (airborne law enforcement) where the observer requires independent access to communications radios
Northern Airborne **AA94** **$3,100**	28/.75	Indep pilot/observer, 6 station ICS, 5 xcvr & PA outputs, active xcvr annunciation, plug comp w/AA90	2 rotary tx sel/ 2 toggle rx sel	13	2.5/ 3/5.75/9	1 yr	M.O.T. approved	Same independent pilot/observer operation as the AA92 with added capability of NAV switching and active xcvr annunciation. Ideal for IFR or EMS applications.
Northern Airborne **AA95** **$2,395**	28/.75	5 xcvr & PA outputs, 6 xcvr inputs, 6 sta ICS, 3 alert inputs, live or keyed ICS, pilot/observer tx capability	Rotary tx sel/ toggle rx sel	13	2/ 1.87/5.75/9	1 yr	M.O.T. approved	Same as AA90 with additional capability of meeting strictest O.A.S. standards.
Northern Airborne **AA10-010** **$1,195**	28/.5	2 xcur outputs,/aux audio input, 3 hdset stations, ICS/RX vol controls.	Toggle	3	1/ 1.09/5.75/6.32	1 yr	M.O.T. approved	Small, lightweight audio sys. Specially designed for piston helicopters. May also have as slave station controller with AA90/92 series controller.
Northern Airborne **AA20-030** **$879**	28/3 max.	Radio monitoring, swept and/or 2 tone siren	Toggle/ pushbutton	N/A	1.0/ 1.09/5.75/8	1 yr	M.O.T. approved	Exceptionally small, self contained 30 watt loudhailer/siren system.
Northern Airborne **AA22-160** **$829**	28/1.0	Radio monitoring, swept and 2/tone siren	Rotary/toggle	N/A	1/ 1.09/5.75/ 6.32	1 yr	M.O.T. approved	Control unit for LoudHailer/Siren sys. Used with up to 5 PA110 amplifiers (see below) to provide up to 550 wt/output power.

Communications *Audio control panels (continued)*

Manufacturer/Model Price	Input (VDC/amps)	Features included	Type controls	Max. inputs	Weight/Panel size (H)(W)(D)	Warranty	TSO	Remarks
Northern Airborne PA110 $699	28/4.5	100w power output LoudHailer amp/max 550W avail.	N/A	N/A	4.5/ N/A/6/4	1 yr	M.O.T. approved	Remote amp for external loudhailer system. Used in conjunction with AA20 for high power requirements
Northern Airborne AA20-50/ PA110 $1,595	28/.5	Internal/external PA/siren system	Toggle/ pushbutton	N/A	5.5/ 1.09/5.75/8 (+ PA110)	1 yr	M.O.T. approved	PA system designed for medium and heavy helicopters to provide both cabin PA and external loudhailer/siren functions in one system.
Northern Airborne AA20/ CT50-430 $1,550	28/2	Electronic chime, cassette tape playback	Pushbutton/ toggle/slide	N/A	3.0/ 3.37/5.75/9	1 yr	M.O.T approved	Standard cabin PA/entertainment system used on the Westland 30. CT50-430 may be used alone as entertainment system.
Northern Airborne AMS40 $1,395	28/.5	Same as AA90/w Loran/VOR CDI transfer switch	Rotary tx sel/ Toggle rx sel	14	2/ 1.87/5.75/9.0	1 yr	M.O.T. approved	Standard version of AA90 custom control series. Comes w/DZUS mount adapter brackets and install kit
Northern Airborne AMS41 $1,495	28/.5	Same as AMS40 except with VOX ICS.	Rotary tx sel/ Toggle rx sel	14	2/ 1.87/5.75/9.0	1 yr	M.O.T. approved	Standard version of AA90 custom controlled series with keyed/live/VOX ICS functions. Comes with DZUS mounting brackets and install kit.
Northern Airborne HSA 70 T.B.A.	28/N/A	Voice advisory of all operating systems status	Rotary/toggle	40	10/ .87/5.75/8	1 yr	M.O.T. approved	Voice annunciation of all cockpit and flight data against real time. Optional data storage of cockpit and flight information for maintenance records.



Now, hear this.

COMPATIBLE HELICOPTER AUDIO
distributed worldwide by:

Hawkins Avionics Company INC.

CALIFORNIA WATS LINE
1—800—472-5794

NATIONAL WATS LINE
1—800—433-2612

NORTHERN AIRBORNE TECHNOLOGY LTD.

nat®

1839 1ST AVENUE
PRINCE GEORGE, B.C. V2L 2Y8

TELEPHONE: (604) 562-2232
"NORAIRTEC – PGEO"
TELEX: 047-7132

Communications *HF transceivers*

Manufacturer/Model Price	Input (VDC/amps) Output (watts)	Frequency range (MHz) No. of channels	Type of tuning/SSB	Installation	Weight	Panel size (H) (W) (D)	Warranty/TSO	Remarks
Collins **HF-230** **$14,080**	28/16.7/ 100	2.0-29.9999/ 280,000	Synthesizer/ Upper SB, lower SB, AM	Remote	24.4	1.87/5.75/5.38	1 yr/ C31c, C32c	½-duplex, compatible w/maritime radiophone net; add'l chan: 40 operator programmable, 176 ITU radiophone programmed; opt SELCAL comp; opt helicopter sys w/PAC-230 probe ant coupler, $14,985, 23.2 lbs.
King **KHF 950** **$13,470**	28V/15.9/ 37.5 (AM)*	2-30 MHz/ 99	Automatic/ LSB, AM, USB, phone	Remote, 3-box sys	20.2	2/5.75/7.7**	1 yr p&l/ Yes	**KCU-951 ctrl head. Choice of 2 panel-mounted ctrl heads. Price incl ctrl/disp unit, recvr/exciter & power amp/coupler. *150 watt output in SSB
King **KHF 990** **$14,090**	28V/ 16.5 xmit/ 37.5 (AM)*	2-30 MHz/ 19	Automatic/ LSB, AM USB, phone	Remote. 3-box sys	21.8	2.35/2.193/5.5	1 yr p&l/ Yes	All 176 ITU maritime radiophone network chan programmed. 19 pilot programmable chan std Price incl ctrl/disp unit, recvr/exciter/power amp & coupler. *150 watt output in SSB

Communications *In-flight telephones*

Manufacturer/Model Price	Input (VDC/amps) Output (watts)	Receiver sensitivity (microvolts)	Control unit	Type of system Antenna	Weight	Warranty/TSO	Remarks
King **KT 96** **$1,965**	14/3.0/ 10	12db S + N @ 1.0 uV (hard)	KT 96	Simplex/ KA55 incl/KA 46A (blade opt)	4.5 w/ handset	1 yr p&l/ Yes	Price incl ant & install kit. KA 115 handset opt. Can be used thru KING audio panels w/ or w/o handset installed. Panel mounted, 28V req opt converter. Handset $365 extra
Wulfsberg **Flitefone VI** **$5,999**	27.5/ 0.9 rx 0.4 tx/ 10 w	0.7 for 10 dB quieting	New cockpit control with choice of 2 cabin ctr handsets	Full duplex/ rod & ball or jetblade	10.7	1 yr/ N/A	Flitefone VI is the first phone capable of "Direct Dial" telephone calls, when connected through an automated ground station. Also will be able to handle manual as well as Direct Dial calls. Full intercomm capability. HF compatable.

Communications *VHF transceivers*

Manufacturer/Model Price	Input (VDC/amps) Output (watts)	Frequency range No. of channels Spacing (KHz)	Features included	Installation	Weight/Panel size (H) (W) (D)	Warranty/TSO	Remarks
Bendix **VCS-40A** **$7,200**	13-33/.5/ 20w	118.-135.975/ 720/ 25 KHz	Dichroic disp, thermal protection, SELCAL & ACARS compatible	Remote	6.7/ 3.1/2.5/ 2.5	2 yr/ C73c, C38c	ARINC 429 interface Extended range tuning opt; Also tuned by FMS
Collins **VHF-20A** **$8,915**	28/6.5/ 20w	118.-135-975/ 720/ 25 KHz	2 storable channels, non-volatile memory; gas discharge display	Remote	6.8/ 3.13/2.5/ 6.5	1 yr/ C37b, C38b	CTL-20 electronic ctrl included; VHF-20B, 118.-151.975 MHz, $11,360
Collins **VHF-21A** **$7,615**	28/5.1/ 20w	118.-135.975/ 720/ 25 KHz	8 storable channels, non-volatile memory; gas discharge display	Remote	5.8/ 2.63/2.38/ 5.39	1 yr/ C37c, C38c	Directly repl VHF-20A; blt-in diagnos, 2x5, serial dig tuning; incl CTL-22 serial tuning ctrl; VHF-21B, 118.-151.975 MHz, $9,975
Collins **VHF-22A** **$7,615**	28/5.1/ 20w	118.-135.975/ 720/ 25 KHz	8 storable channels, non-volatile memory; gas discharge display	Remote	5.8/ 2.63/2.38/ 5.39	1 yr/ C37c, C38c	Blt-in diagnos; 2x5, serial dig tuning; incl CTL-22 serial tuning ctrl; VHF-22B, 118.-151.975 MHz, $9,975
Collins **VHF-253** **$2,635**	10-32/ 4.3 @ 14V/ 10w	118.-135.975/ 720/ 25 KHz	6 storable channels, EAROM non-volatile memory; LCD display	Panel	2.7/ 1.3/6.3/ 12.1	1 yr/ C37b C38b	Rem freq mgmt; visible act & stndby freq + 4 stored presets; opt broadband (VHF-253S), $2,995
CSI **TR-720** **$595**	9.6/.039 (rec)/ 1w	118.-135.975/ 720/ 25 KHz	Twist-off battery, 3 memory chan, FM noise squelch	Portable (handheld)	1.2/ 6.6/2.6/ 1.5	3 yr/ No	Synthesized, operates on all 720 COMM channels and 200 NAV channels, all accessories included.

Communications *VHF transceivers (continued)*

Manufacturer/Model Price	Input (VDC/amps) Output (watts)	Frequency range No. of channels Spacing (KHz)	Features included	Installation	Weight/Panel size (H) (W) (D)	Warranty/TSO	Remarks
Dayton Granger 150-2A N/A	16.5/ 1w	121.5/123.1 2/ 25 KHz	Alkaline battery pack	Portable	3.3/ 11/3.5/1.5	1 yr No	Mounting bracket and floatation collar optional; self-contained microphone/speaker; waterproof
Dayton Granger 150-3A N/A	16.5 1w	121.5/123.1 2/ 25KHz	Water-activated battery pack	Portable	2.3/ 9.75/ 3.5/1.5	1 yr No	Mounting bracket and floatation collar optional; self-contained microphone/speaker; waterproof
Dayton Granger 150-4A N/A	12.5 1w	VHF/UHF 4/ 25KHz	Alkaline battery pack	Portable	2.3/9.75/ 3.5/1.5	1 yr/ N/A	Mounting bracket and floatation collar optional; self-contained microphone/speaker; waterproof
King KY 92 $1,745	14 or 28/ 4.5/ 7	118.-135.975/ 720/ 25 KHz	Auto squelch	Panel	2.8/ 1.5/6.25/ 10.5	1 yr/ c37b, C38b	Crystal ctrl dig synthesized; *KA 39conv req for 28V operation, $230
King KY196 $2,475	28V/5/ 16	118.-135.975/ 720/ 25 KHz	Disp act & stby freq	Panel	3.2/ 1.3/6.25/ 14.6	1 yr/ C37b, C38b	Act & stby freq simultaneously disp w/non volatile memory. 9 Pilot-programmable chan for freq storage in non volatile memory. Opt ext freq range avail.
King KY197 $2,475	14V/6/ 7	118.-135-975/ 720/ 25 KHz	Disp act & stby freq	Panel	3.2/ 1.3/6.25/ 14.6	1 yr/ C37b, C38b	Act & stby freq simultaneously disp w/non volatile memory. 9 Pilot-programmable chan for freq storage in non volatile memory.
King KTR 908 $6,725	28V/7/ 20	118.-135.975/ 720/ 25 KHz	Disp act & stby freqs, KFS 598 dig ctrl hd; flip-flop of act & stby freq	Remote	4.3/ 5/1.7/11.8	1 Yr/ C37b, C38b	Opt KFS 593 gables ctrl hd; Remote flip-flop of freq. Opt VHF SELCAL capability avail. Opt cont head avail. For freq MSMT from KNS 660 and 9 Pilot-programmable chan for freq storage. Opt ext freq range avail.
King KTR 9100 $7,882.50	27.5/ .8rx/8.tx 25	118.-135.975/ 720/ 25 KHz	Auto squelch, Audio Leveling	Remote	13.0/ Std ARINC 1/2 ATR Sht case	1 yr/ p&I C37b, C38b Yes	Does not include control head. Mounting rack and connector $660.00
Narco COM-120 $2,195	14 or 28*/ 10 nom	118.-135.975/ 720/ 25 KHz	Auto squelch, blt-in intercom	Panel	3.5/ 1.75/6.25/ 11	1 yr, 2 yr opt C37b, C38b	Tx indicator lamp, mike & audio leveling, *28V req converter MP-10
Narco COM-120/20 $2,295	14 or 28*/ 20	118.-135.975/ 720/ 25 KHz	Auto squelch, blt-in intercom	Panel	3.8/ 1.75/6.25/ 11	1 yr, 2 yr opt/ N/A	Tx indicator lamp, mike & audio leveling, *28V req converter MP-20
Narco COM-810 $2,150	14/.7 8 nom	118.-135.975/ 720/ 25 KHz	Displays active & standby freq	Panel	2.9/ 1.5/6.25/ 11	1 yr, 2 yr opt C37b, C38b	Built-in intercom, remote transfer of active & standby freq
Narco COM-811 $2,150	28/3 8	118.-135.975/ 720/ 25 KHz	Displays active & standbv freq	Panel	2.9/ 1.5/6.25/ 11	1 yr, 2 yr opt C37b, C38b	Built-in intercom, remote transfer of active & standby freq
Narco HT-800 $595	9.5V/ 2 w	118.-135.975/ 720/ 25 KHz	LCD display, keyboard entry, 10 freq storage	N/A, handheld	1.25/ 6.75/2.75 2	1 yr, 2 yr opt No	Incl NiCad battery, antenna, wall charger & earphone. Add'l accessories avail
Wulfsberg RT-118 $4,260	27.5/ .9 rx, .65 tx 20w	118-138 MHz/ 800/ 25 KHz	30 pre-prog chan when used with C-1000 ctrl head	Remote RT w/std DZUS width control head	5.6/ 2.35/5.75/ 4.3	1 yr p&I/ C37b, C38b	Works with Wulfsberg flexcomm FM package.
Wulfsberg WT-200B $4,095	27.5/ .9 rx, .65 tx 20w	118-151.975 1,360/ 25 KHz	N/A	Remote RT, Panel-mounted control head	5.6/ 5/2.87/ 13.25	1 yr p&I	Compatible with any ARINC 2 out 5 tuning code

Communications *VHF/FM mission control transceivers*

Manufacturer/Model Price	Input (VDC/amps) Output (watts)	Frequency range Spacing (KHz)	No. of channels	Features included	Component independence	Installation	Weight/Panel size (H) (W) (D)	Warranty/TSO	Remarks
Wulfsberg RT-15 $2,490	27.5/1.2 rx 13.5/3.6 tx 10w	142-173.995 MHz 25 or 30 KHz	6	N/A	N/A	Remote	5.9/ 5/3.5/10.5	1 yr	N/A
Wulfsberg RT-16B $2,590	27.5/.7 rx 13.5/2.2 tx 10w	450-512 MHz 25 KHz	16	N/A	N/A	Remote	5.9/ 5/3.5/10.5	1 yr	N/A
Wulfsberg RT-19 $2,344	27.5/1.2 rx 13.5/3 tx 10w	29.7-49.99 MHz 20 KHz	6	N/A	N/A	Remote	5.9/ 5/3.5/10.5	1 yr	N/A
Wulfsberg RT-30 $4,309	27.5/1 rx 2.4 tx 10w	29.70-49.99 20 KHz	2,030	N/A	N/A	Remote RT with C-1000 control	7.5/ 2.35/5.75/ 4.3	1 yr N/A	Pre-program 30 frequencies. All 32 standard EIA tones standard in RT.
Wulfsberg RT-138 $4,144	27.5/1 rx 2.2 tx/ 10w	138-173.9975 2.5 KHz	14,400	N/A	N/A	Remote RT with C-1000 control	7.5 2.35/5.75/ 4.3	1 yr N/A	Pre-program as many as 30 frequencies. All 32 standard EIA tones standard in RT
Wulfsberg RT-450 $4,709	27.5/1 rx 2.2 tx 10w	450-470 MHz 12.5 KHz	1,600	N/A	N/A	Remote RT with C-1000 control	7.5 2.35/5.75/ 4.3	1 yr N/A	Pre-program as many as 30 frequencies. All 32 standard EIA tones standard in RT
Wulfsberg RT-7200 w/ 722A and install kits $5,636	27.5/1.5 rx 5.5 tx/ 10w	138-174 MHz 5 KHz	7,200	N/A	N/A	Remote mounted	9.3/ 5.19/5/ 12.58	1 yr N/A	Eight CTCSS tones avail. Control head C-722A
Wulfsberg RT-9600 w/C962A and install kits $6,489	27.5/1.5 rx 5.5 tx/ 10w	150-174 MHz 2.5 KHz	9,600	N/A	N/A	Remote mounted	9.3/ 5.19/5/ 12.58	1 yr N/A	Eight CTCSS tones avail. Control head C-962A
Wulfsberg C-1000 $2,290	N/A	N/A	N/A	FM transceiver control head	N/A	N/A	2.6 3/5.75/ 7.5	1 yr N/A	Ability to thumbwheel control all of the available Flexcomm channels (RT-30, RT-138, RT-450 and RT-118)

Directory of manufacturers' contacts

For additional information on avionics listed in this section, call the manufacturers' contacts shown below:

Aeronetics	312-437-9300
Arnav	503-393-2550
Astronautics	414-447-8200
Aviation Instrument (AIM)	512-251-2351
Baker Electronics	813-355-7625
Bendix	305-928-2100
Canadian Marconi	514-341-7630
Collins	319-395-4102
Communications Specialists	714-998-3021
Dayton-Granger	305-463-3451
Dorne & Margolin	516-585-4000
Foster	614-888-9502
King	913-782-0400
Kollsman	603-889-2500
Litton	805-378-2000
Narco	215-643-2900
Northern Airborne	604-562-2232
Offshore Navigation	504-733-6790
Sensor	818-341-5366
SFENA	214-988-8000
SFIM	213-995-3655
Sperry	602-863-8000
3M Stormscope Systems	614-885-3310
II Morrow	503-581-8101
Teledyne	818-886-2211
Texas Instruments	214-462-5220
Tracor	805-967-4571
Universal	213-325-4081
Wulfsberg	913-492-3000

Flight control *Autopilots*

Manufacturer/Model Price	STC (s)	Stabilized in	Command turn/Preselect Tracking	Flight director interface	Single pilot IFR certification	Weight	Warranty	TSO	Remarks
Astronautics P/N 131500 On request	500D 500E	Roll Pitch Yaw	Yes Yes No	No	No	N/A	1 yr or 1,000 hrs	Yes	Modes include hover, altitude hold and heading hold in cruise and hover
Astronautics P/N 131500-9 On request	500D 500E	Roll Pitch Yaw	Yes Yes Yes	No	No	N/A	1 yr or 1,000 hrs	Yes	Modes include altitude hold, hover, heading hold, nav coupling to VOR/ILS, Loran, etc.
SFENA FCS 200B $40,614- $57,364	206B series	Roll Pitch Yaw	Yes Yes Yes	Yes	Yes	37-50	1 yr	Yes	Yaw channel opt; system includes force trim. Features full time turbulance damping and atti. retention throughout total flight envelope and more
SFENA FCS 200L $47,380- $64,130	206L series	Roll Pitch Yaw	Yes Yes Yes	Yes	Yes	40-50	1 yr	Yes	Yaw channel opt; systems includes force trim. IFR kit avail for $32,000 plus avionics.
SFENA FCS 90 $78,940	222UT or B series	Roll Pitch Yaw	Yes Yes Yes	Yes	Yes	45-60	1 yr	Yes	Includes auto pitch and roll trim, heading select, altitude hold, beep trim, force trim and primary altitude horizon
SFIM AP 137 On Request	SA 330	Roll Pitch Yaw	No	Yes	No	20	1 yr or 1,000 hrs	Yes	Modes includes altitude, turn coordination
SFIM AP 155D On Request	AS 365N	Roll Pitch Yaw	Hdg	Yes	Yes	45	2 yr or 2,000 hrs	Yes	Duplex, fail passive, fail operational integrated preflight text.
SFIM AP 155P On Request	AS 332	Roll Pitch Yaw	Hdg	Yes	No	21	1 yr or 1,000 hrs	Yes	Duplex, fail passive, fail operational integrated flight test standard on AS 332
SFIM AP 85E3 On Request	AS 350	Roll Pitch Yaw	Hdg	No	No	15	2 yr or 2,000 hrs	Yes	Modes include altitude, A/S Hdg select, turn coordination
SFIM AP 85T31 On Request	AS 335 AS 350	Roll Pitch Yaw	Hdg	No	No	40-50	2 yr or 2,000 hrs	Yes	Modes include altitude, A/S Hdg turn-coorindation. Two axis version available

Flight control *Flight directors*

Manufacturer/Model Price	Input (VDC/amps)	Features included	STC (s)	Display type/HSI Autopilot interface	Single pilot IFR/Installation	Weight/Panel size (H) (W) (D)	Warranty/TSO	Remarks
Astronautics P/N 131810 On request	115VAC, 400 Hz	2 Cue F/D; hdg hld, VOR/ILS, BC, alt hld, GS, RNAV, standby & go-around	S-76	ADI 5"/ HSI 5"/ No	No/ N/A	4/ 3/3/N/A	1 yr or 1,000 hrs/ Yes	Computer & mode select panel is in one unit & is panel mounted. Cyclic pitch & roll
Astronautics P/N 129655 On request	115VAC, 400 Hz	3 Cue F/D; hdg, VOR/ILS, man & auto decel, AS hld, alt hld, RNAV, descent, & go-around	S-76	ADI 5"/ HSI 5" No	No/ N/A	6/ 3/3/6	1 yr or 1,000 hrs	Cyclic pitch & roll, collective pitch
SFENA FDS 90 $32,604	28/1	Digital; tracks/captures HDG, V/L, BC, ALT, GS, IAS, DC*	206B ser, 206L ser, 20[illegible], 222UT	4" ADI, 3 cue/any/ Yes	Yes/ Panel	4" ADI, 3" Cntrlr 4/4/9.2/ 3/3/9.2	1 yr/ Yes	*DC- decelleration available with 222B & 222UT only

Flight control *Integrated flight control systems*

Manufacturer/Model Price	STC (s)	Single pilot IFR Command turn	Stabilization in	Preselect capability	Tracking capability (modes)	Flight director interface	Weight/Warranty/TSO	Remarks
SFENA FCS 200/ FDS 90 $79,984- $96,734	206B series, 206L series	Yes/ Yes	Roll, pitch, yaw	Yes	HDG, V/L, BC, ALT, GS, VS, IAS	Yes	65/ 1 yr/ Yes	Yaw channel opt, single pilot IFR opt; IFR appx. $18K-32K
SFENA AFCS 90 $96,100	222B 222UT	Yes/ Yes	Roll, pitch, yaw	Yes	HDG, V/L, BC, ALT, GS, VS, IAS, DC*	Yes	55/ 1 yr/ Yes	Collective channels opt; Decel mode-std.
SFIM AFCS 155 On Request	AS 332 AS 365N	Yes/ Yes	Roll, pitch, yaw, collective	HDG, CRS, VS, IAS, rad alt, hov ht	HDG, AS, ALT, VS, VL, PC, GS, HOV, NAV, radalt, go-around, fly up	Yes	65/ 90 day/ Yes	AP 155 along with digital 4-axis FDC 155, or FDC 85 if fourth axis not required, FDC 85 P4 for CAT II approaches
SFIM AFCS T31 On request	AS 355	Yes/ Yes	Roll, pitch, yaw	HDG, CRS, VS	HDG, AS, ALT, V/S, VL, BC, GS, NAV, turn coordination, go-around	Yes	30/ 2 yr/ Yes	N/A
Sperry SHZ 109-2 On request	AB 109, AB109-2	Yes/ Yes	Roll, pitch, yaw	HDG	HDG, VOR, LOC, GS, Loran, RNAV/, ALT, A/S	AD-500/ FZ-702	Varies/ 1 yr/ Yes	TC by Agusta
Sperry SHZ-212-2 On request	Bell 212	Yes/ Yes	Roll, pitch, yaw	HDG	HDG, VOR, LOC, GS, Loran, RNAV, A/S, ALT	Astro-nautics FZ-702	Varies/ 1 yr/ Yes	STC held by Associated Air Ctr
Sperry SHZ-212-3 On request	Bell 212	Yes/ Yes	Roll, pitch, yaw	HDG	HDG, VOR, LOC, GS, Loran, RNAV, A/S, ALT, VLF Omega	Astro-nautics FZ-702	Varies/ 1 yr/ Yes	Retrofit kits avail: STC by Sperry. Incl auto-trim
Sperry SHZ-222 On request	Bell 222A Bell 222B	Yes/ Yes	Roll, pitch, yaw	HDG	HDG, VOR, LOC, GS, Loran, RNAV, A/S, ALT	GH-222/FZ-702	Varies/ 1 yr/ Yes	TC by Bell
Sperry SHZ-350D On request	AS-350D	Yes/ Yes	Roll, pitch, yaw	HDG	HDG, VOR, LOC, GS, Loran, RNAV, A/S, ALT	AD-550/FZ-702	Varies/ 1 yr/ Yes	STC by Sperry
Sperry SHZ-355F On request	AS-355F-1	Yes/ Yes	Roll, pitch, yaw	HDG	HDG, VOR, LOC, GS, Loran, RNAV, A/S, ALT	AD-550/ FZ-702	Varies/ 1 yr/ Yes	Retrofit kits avail: STC by Sperry
Sperry SHZ-360 On request	SA-360	Yes/ Yes	Roll, pitch, yaw	HDG	HDG, VOR, LOC, GS, Loran, RNAV, A/S, ALT	GH-14 or AD-650/FZ-702	Varies/ 1 yr/ Yes	STC by Aerospatiale
Sperry SHZ-365C On request	SA-365C	Yes/ Yes	Roll, pitch, yaw	HDG	HDG, VOR, LOC, GS, Loran, RNAV, A/S, ALT	AD-650/ FZ-702	Varies/ 1 yr/ Yes	STC by Heliflight
Sperry SHZ-412 On request	Bell 412	Yes/ Yes	Roll, pitch, yaw	HDG	HDG, VOR, LOC, GS, Loran, RNAV, A/S, ALT	Astro-nautics FZ-702	Varies/ 1 yr/ Yes	TC by Bell
Sperry SHZ-760 On request	S-76A	Yes/ Yes	Roll, pitch yaw	HDG	HDG, VOR, LOC, GS, Loran, RNAV, VLF Omega, A/S, ALT	AD-650/ FZ-702	Varies/ 1 yr/ Yes	STC by Heliflight
Sperry SPZ-7000 On request	SA-365N; S-76A/ S-76B Bell222UT	Yes/ Yes	Roll, Pitch, yaw, collective	HDG, ALT, A/S, V/S	HDG, VOR, LOC, GS, Loran, RNAV, A/S, ALT, VLF Omega	AD650; EFIS/ FZ-700	Varies/ 1 yr/ Yes	Dig. 4-axis sys; retrofit kits avail; EFIS opt. on S-76, 365N STC by Sperry on S-76, 365N STC held by HeliDyne on 222UT

Electronic flight instrument systems *Display units*

Manufacturer/Model Price	Input (VDC) Power (watts)	Display type	Required maintenance interval	External fans	Weight/Panel size (H) (W) (D)	Warranty/TSO	Remarks
Bendix -ED102A $16,430	18-33/55	Shadow Mask Color CRT	N/A	Not required	14/6.25/6.25/14	2 yr/Yes	Units electrically interchangeable, MFD displays differ only in size, dual stroke/raster provides solid symbols and bright displays, dispatch capability with single component failure.
Bendix -ED102B $15,270	18-33/45	Shadow Mask Color CRT	N/A	Not required	10/5/6/14	2 yr/Yes	Units electrically interchangeable, MFD displays differ only in size, dual stroke/raster provides solid symbols and bright displays, dispatch capability with single component failure.
Bendix -ED102C $12,250	18-33/45	Shadow Mask Color CRT	N/A	Not required	9/4.8/5.1/10.7	2 yr/Yes	Units electrically interchangeable, MFD displays differ only in size, dual stroke/raster provides solid symbols and bright displays, dispatch capability with single component failure.
Bendix -ED102D $12,250	18-33/45	Shadow Mask Color CRT	N/A	Not required	9.5/4.8/5.1/10.7	2 yr/Yes	Units electrically interchangeable, MFD displays differ only in size, dual stroke/raster provides solid symbols and bright displays, dispatch capability with single component failure.
Sperry ED-600 On request	28/63 max	High resolution CRT	N/A	Recommended	9/4.7/5.1/10.4	Standard/Yes	N/A
Sperry ED-800 On request	28/63 max	High resolution CRT	N/A	Recommended	10/5.1/6.1/10.4	N/A	N/A

Electronic flight instrument systems *Symbol generators*

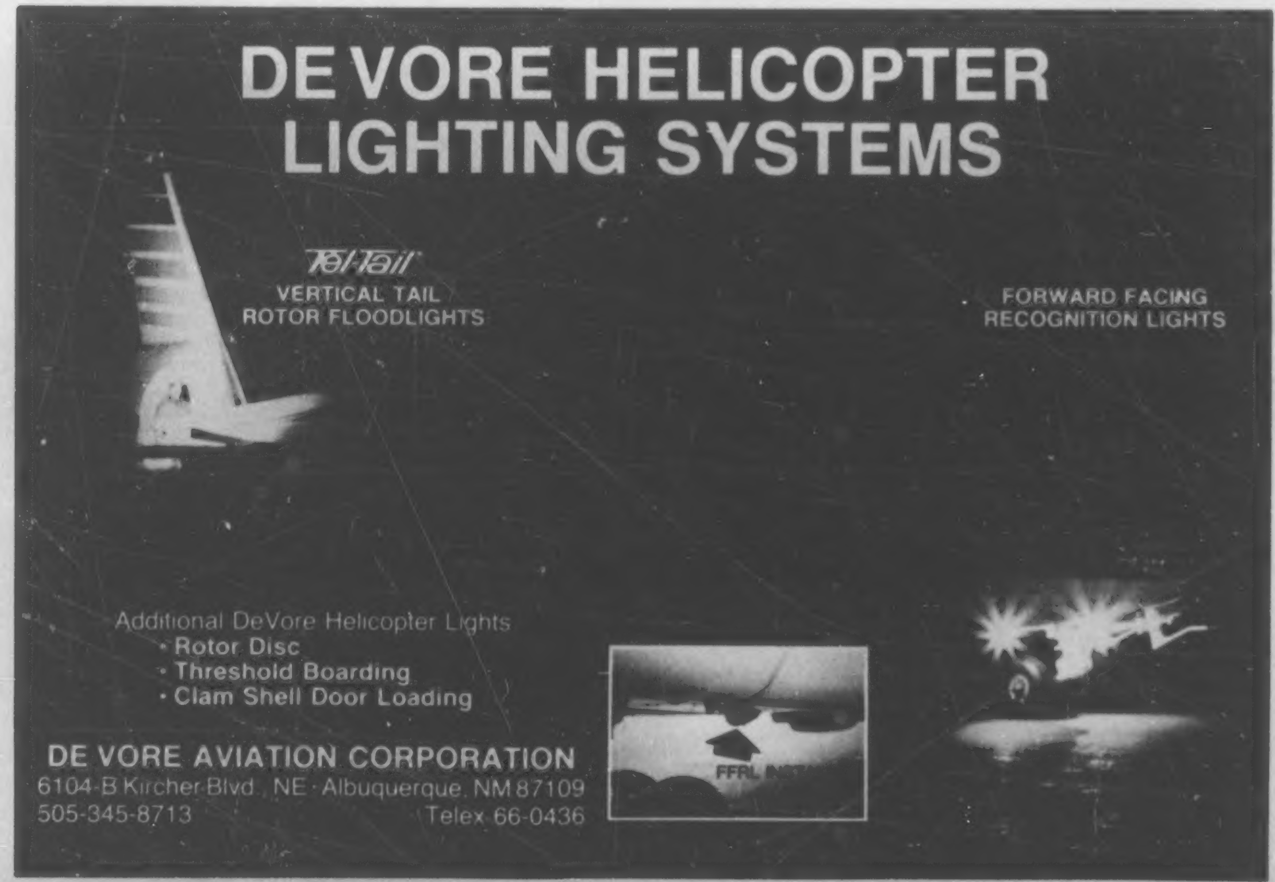
Manufacturer/Model Price	Input (VDC) Power (watts)	NTSC/FLIR Interface	Video outputs per SG	Aircraft specific software required	External fans	Mounting	Weight/Size (H) (W) (D)	Warranty/TSO	Remarks
Bendix -SG101A $22,550	18-33/95	Yes	5	No	Not required	Front	12.5/8/6/11	2 yr/Yes	ARINC 429 interface. Software certification industry's most advanced.
Bendix -SG101B $24,730	18-33/95	Yes	5	No	Not required	[illegible]/DPX	13.0/8/6/12.62	2 yr/Yes	ARINC 429 interface. Software certification industry's most advanced.
Sperry SG-705 On request	28/70 max	No	2	No	Not required	Tray	16.9/7.6/4.9/15.8	Standard/Yes	N/A

Navigation *Area navigation systems*

Manufacturer/Model Price	Input (VDC/amps)	Frequency range No. of channels	No. of waypoints/ Waypoint entry/ Max nm	Type display	VOR/DME integration	Extra functions	Interface	Weight/Panel size (H) (W) (D)	Warranty/TSO	Remarks
Collins ANS-351 $4,285	14, 28/1.3 @ 14V	VOR/DME interface	8/Dial/199.9	Incand	VOR w/video output; 40 mv/nm analog DME	Gnd spd, time to WP, enroute appr modes	AP, HSI, RMI (built in VOR converter)	3.3/1.75/6.25/12.25	1 yr./C36c	Pos check briefly returns sys to raw data; digital brg TO/FR WP on VIR-351
Foster RNAV612 $6,900-9,500	11-32/.33	VOR/DME Interface	5/Knob	Incand filament	Yes	Range monitor std, Auto WP Blt/in TSO'd VOR/LOC Conv	All NAV & DME	3/3-ATI 10.04	1 yr/C36c C40a	NAV 1/NAV 2 switching; Pres pos disp; slant rng corr; RMI drive
Foster RNAV612A $4,550-$7,150	11-32/.33	VOR/DME Interface	4/Knobs	Incand filament	All VOR & DME/Yes	Blt/in TSO'd VOR/LOC Conv	All VOR/DME	3/3-ATI/10.04	1 yr/C36c, C40a	NAV 1/NAV 2 switching; Pres pos disp, slant rng corr; RMI drive
King KNR 665A $18,255	28V/2 5	199.1/200	10/Pushbutton	HSI, dig gas discharge	Incl nav, GS req KDM 706 DME, KPI 552 or 553A HSI	Gnd spd, TTW, auto course, stores in & outbound hdg	FD, AP, HSI	13.9/5/5.5/11.7	1 yr/C34c, C40a, C36c	Sys incl KCU 565A ctrl disp & battery pack

Navigation *Area navigation systems (continued)*

Manufacturer/Model Price	Input (VDC/amps)	Frequency range No. of channels	No. of waypoints/ Waypoint entry/ Max nm	Type display	VOR/DME integration	Extra functions	Interface	Weight/Panel size (H) (W) (D)	Warranty/TSO	Remarks
King KNS 80 $6,685	14 or 28V/ 2.1 (14), 1.1 (28)	199/ 200	4/ Rotary, pushbutton	Dig, gas discharge, CDI, HSI	Incl nav, GS & DME	Gnd spd & time to WP, DME hld	FD, AP, HSI	6/ 3/6.25/12	1 yr/ No	VOR parallel & RNAV appr mode; incl 200 chan nav, 40 chan GS, 4 WP RNAV, 200 chan DME
King KNS 81-10 $5,110	14 or 28V/ 1 (14), .5 (28)	108/117.95 200	10 incl freq/ Rotary, pushbutton	Dig, gas discharge	Incl nav & GS, req KN63, KDM706 or KN62A DME	Disp all WP parameters simult, radial from WP or VOR	FD, AP, HSI	5/ 2/6.3/11.5	1 yr/ Yes C34c, C36c, C40a	VOR parallel mode, optional interface W/KGR356, $310. add'l
King KNS 81-30 $8,490	14 or 28V/ 1 (14), .5 (28)	199.9/ 454	10/ Rotary, pushbutton	CDI, HSI, dig, gas discharge	Incl VOR & GS, req KTU 709 Tacan	Disp all WP parameters simult disp radial from VOR or WP, also can use Tacan for brg input	FD, AP, HSI	5/ 2/6.3/11.5	1 yr/ C34c, C36c, C40a	Operates using either VOR or Tacan brg; model compat w/KGR radar graphics, $225 xtra
Narco NS-801 $2,595	14, 28/ 1.2, .6	108-117.95/ 200	8/rotary-pushbutton	Gas dis, CDI, HSI	incl VOR and GS	Auto load of pres pos, non-vol memory	HSI/ IDME-891/ AP, FD	2.9/ 2.25/ 6.38/11	1 yr; 2 yr opt/N/A	Interfaces w/Narco DME-190, 195, 890, IDME-891 and King KN-64, KN-62A
Narco NS-800 $4,595	11-32/ 1.2 @ 14VDC	108-117.95/ 200	8/rotary-pushbutton	Gas dis	Incl NAV, GS, and DME	Displays WP parameters along/w dist, gdspd, time to WP, radial to or from WP	FD, AP, HSI	4.4/ 2.96/ 6.25/11.55	1 yr/ C40b, C36c, C34c	VOR parallel and RNAV mode, 100 watt, 200 channel NAV and DME, 40 channel


DE VORE HELICOPTER LIGHTING SYSTEMS

Tel-Tail
VERTICAL TAIL ROTOR FLOODLIGHTS

FORWARD FACING RECOGNITION LIGHTS

Additional DeVore Helicopter Lights
- Rotor Disc
- Threshold Boarding
- Clam Shell Door Loading

DE VORE AVIATION CORPORATION
6104-B Kircher Blvd., NE · Albuquerque, NM 87109
505-345-8713 Telex 66-0436

Navigation *Automatic direction finders*

Manufacturer/Model Price	Input (VDC/amps)	Frequency range (KHz) No. of bands	Type of tuning	Features included	Display features	Installation	Weight/Panel size (H) (W) (D)	Warranty/TSO	Remarks
Bendix DFS-43A $8,960	18-33/ .6	190-1860/ .5 KHz spacing	Gray code/ ARINC 429	ADF l-r steering to HSI	Dig brg, Dichroic disp	Remote	11.9/ 3.1/2.5/2.5	2 yr/ C41c	Combined low-drag ADF loop & sense antenna
Collins ADF-60A $8,736	28/.6	190.0-1749.5/ 6	Digital	Stores 2 chan, non-volatile memory; gas/disp	N/A	Remote	8.7/ 3.13/2.5/6.5	1 yr/ C41C	Coherent detection; combined loop-sense ant incl (ANT-60A); dual ant opt (ANT-60B); 3-wire or sin/cos RMI output avail; incl CTL-60 electronic ctrl; opt CTL-62 w/CAD-62 adapter for serial dig tuning & 6 stored chan
Collins ADF-650A $2,970	14, 28*/ 1.0 (14V)	200-1799/ N/A	Digital, continuous	N/A	Rotating azimuth, int light	Panel	6.0/ 1.75/6.25/ 10.8	1 yr/ C41c	Incl ANT-650A combined loop-sense ant & IND-650A indicator; *Adapter, $75
King KR 86 $2,230	14/28*/ .5	200-1750/ 3	Mechanical	Bit-in test button & BFO	Indicator bit-in face-plate	Panel	6.6/ 2.6/6.25/ 9.05	1 yr p&l/ No	Many install kits avail; price incl ant & install kit; *Requires 28V kit. Tapered to fit top of panel
King KR 87 $3,070	11-33/ .85 (14V) .42 (28V)	200-1799/ 5	Electronic	Stdby freq-flt & elapsed timers incl	Dig disp of act & stdby freq	Panel Sep 3'' ind	6.7/ 1.38/6.31/ 11.23	1 yr p&l/ C41c	Price incl KI227 ind, combined sense & loop ant, & install kit, non-vol memory, coherent detection bit-in for greater range
King KDF 806 $7,165	11-33/ 1.3	190-1799/ 5	Electronic	Coherent detect for more range	Dig disp of act/sby freq w/flip-flop xfer button	Remote	7.40/ 2.25/2.093/ 7.375	1 yr p&l/ C41c Class A	Incl install kit, ant & dig ctrl head. No ind. Non-vol mem. Remote flip-flop avail. Strappable to rec 2182 KHz. Act freq can be tuned direct. Optional ctrl head for KNS 660 freq MGMT and 9 pilot prog channels for freq storage
Narco ADF-841 $2,795	11/.8— 32/.4	200-1799	Electronic	Combined loop-sense ant	Stdby freq flt & elapsed timers inc	Panel w/sep 3'' indicator	2.7/ 1.5/6.25/ 10.25	1 yr; 2 yr opt/ C41C Class A	Coherent detection for greater range

Navigation *Distance measuring equipment*

Manufacturer/Model Price	Input (VDC/amps) Output (watts)	No. of channels	Type of display	Effective distance coverage Speed readout/TTS	Installation	Weight/Panel size (H) (W) (D)	Warranty/TSO	Remarks
Bendix DMS-44A $10,760	18-33/.7/ 325	252	Dichroic disp	0-300/ 0-999/ 0-19:59	Remote	7.7/ 1.5/3.2/2.5	2 yr/ C66c	Triple scanning DME, disp N_1 & N_2 distance at once; outputs for ARINC 568, 429, 40 mv/nm & 40 bit serial FMS tuneable
Collins DME-40 $12,010	28/1/ 300 (40 mv/nm)	252	Gas discharge	0-250/ 0-999/ 0-99	Remote	8.1/ 1.66/3.38/ 6.59	1 yr/ C66a	Distance accuracy: ± 0.1nm or 0.01 %; ARINC 568, pulse pair; incl IND-40 ind
Collins DME-42 $11,155	28/.8/ 300 (40 mv/nm)	252	Gas discharge	0-300/ 0-999/ 0-120	Remote	6.2/ 1.66/ 3.38/6.59	1 yr/ C66b	Disp ID: 2-4 letters; incl 2-digit code diagnos; directly repl DME-40; trks 3 chan at once if used w/CTL-32 & IND-42A (CTL-32 ctrls nav rcvr); serial dig, 2x5 tuning; dig signal processing; echo monitor; ARINC 568B, serial dig; incl IND-42A ind
Collins DME-450 $5,165	14 or 28v/ 2.2a (14V)/ 100w (40 mv/nm)	200	Incand filament	0-199.9/ 0-399/ 0-120	Remote	6.1/ 1.35/3.5/5.3	1 yr/ C66a	Dist accuracy: ± 0.1 nm or 1 %; Incl ANT-451 ant & IND-450 ind
Collins DME-451 $6,265	14 or 28v/ 2.2a (14V) 100w (40 mv/nm)	200	Incand filament	0.199.9/ 0-399/ 0-120	Remote	6.4/ 3.26/3.26/ 5.4	1 yr/ C66a	Dist accuracy: ± 0.1 nm or 1 %; built-in timer based on GMT clock; incl ANT-451 ant & IND-451 ind
King KDM 706 $9,215	14 or 28V/ 1.7 (14), .8 (28)/ 250	200	Dig. gas discharge	389/ 0-999/ 0-99	Remote	5.5/ 5.25/2.5/ 11.8	1 yr/ C66a	Includes KDI 572 ind; KDM 706 will drive DME of KPI 553A HSI and optional KDI 573 slaved ind
King KDM 706A $9,540	28V/0.75 250	252	Dig. gas discharge	389/ 0-999/ 0-99	Remote	6.3/ 5/3/10	1 yr/ C66b	KDM 706 w/Arinc 429 & 568 interface

Navigation *Distance measuring equipment (continued)*

Manufacturer/Model Price	Input (VDC/amps) Output (watts)	No. of channels	Type of display	Effective distance coverage Speed readout/TTS	Installation	Weight/Panel size (H) (W) (D)	Warranty/TSO	Remarks
King KDM 7060 $10,600	115 (AC)/ .5/ 250	252	Not incl	389/ N/A/ N/A	Remote	11.6/ ½ ATR short	1 yr/ C66b	Arinc 568 replacement unit; no ind Mounting rack and connector $796
King KDM 7070 $12,156	115 (AC)/ .7/ 250	252	Not incl	389/ N/A/ N/A	Remote	16.7/ ½ ATR short	1 yr/ C66a	Arinc 521D replacement unit; no ind Mounting rack and connector $796.
King KN 62A $3,665	11-33/ 14V-1.07 28V-.535/ 100	200	Simultaneous dig disp of dist, GS & TTS	0-389/ 0-999 kts/ 0-99 min	Panel	2.6/ 1.3/6.312/ 12.258	1 yr p&l/ C66a	All solid-state, int & remote chan capability.
King KN 63 $5,565	11-33/ 14V-1.21 28V-.60/ 100	200	Simultaneous disp dist, GS & TTS	0-389/ 0-999/ 0-99 min	Remote	3.6/ 1.35/3.5/ 6.47	1 yr p&l/ Yes	All solid-state, includes antenna & installation kit. Accepts slip code, BCD and 2 × 5 channeline formats.
King KN 64 $1,795	11-33/ 14V-1.071 28V-.625/ 35	200	Simultaneous dig disp of dist, GS & TTS	0-389/ 0-999/ 0-99 min	Panel	2.6/ 1.3/6.312/ 12.258	1 yr p&l/ No	Solid-state, internal & remote chan capability. Price incl ant & install kit
King KTU 709 $14,055	14 or 28V/ 1.7 (14, 7.5 (28)/ 250	252	Dig, gas discharge	389/ 0-999/ 0-99	Remote	5.8/ 6.25/3/11.8	1 yr/ C66b	Tacan brg info may be disp on conventional CDI/HSI to offer independent, non-VOR based brg info. Incl KDI 572 disp DIST, GS, TTS
Narco DME-890 $2,150	11-32v/ 1.4a/ 25w nom.	200	Digital, gas discharge	160/ 600 kts/ 0-99	Panel	3.9/ 1.5/6.25/11	1 yr; 2 yr opt./ No	Remote channeling capability; simultaneous display of DIST, GS, & TTS. Price incl ant
Narco IDME-891 $2,195	11-32/ 1.4/ 25w nom.	200	Digital, gas discharge	160/ 600 kts/N/A	Panel, 3" inst hole	2.6/ 3.19/3.19/ 9.14	1 yr; 2 yr opt./ No	Incl VOR/ILS indicator & marker lights. Compatible w/ Narco MK-12D, NAV-825, NS-801 RNAV. *Package price with MK-12D-$4,995

Navigation *Glideslope receivers*

Manufacturer/Model Price	Input (VDC/amps)	No. of channels	Receiver interface	Display interface	Weight	Panel size (H) (W) (D)	Warranty/TSO	Remarks
Collins GLS-350 $985	14/0.7	40	VIR-351	HSI, CDI	2.0	5/1/10.7	1 yr/ C34c	N/A
King KN 75 $975	14/2-V/.72	40	"Universal" chan capability	HSI/CDI	1.6	Remote	1 yr p&l/ Yes	Remote mounted. Universal channel allows channelling of KN75 from 2x5, KING slip code.

Navigation *Horizontal situation indicators*

Manufacturer/Model Price	Functions	Display/Rcvr RNAV interface	Flight director interface A/P interface	Weight/Panel size (H) (W) (D)	Warranty/TSO	Remarks
Aeronetics **8000** **$6,680**	L-R dev, T/F, Nav flag, GS dev, GS flag, OLS, HDG flag, card	N/A/ Std ARINC input	AC synchro output/ AC synchro output	2.9/ 3.21/3.21/8	1 yr/ C6c, C34c, C36c, C40b	List price of $6,350 incl remote DG & flux valve; 8000 sys features "Automatic emergency mode" operation
Aeronetics **8131** **$4,180**	L-R dev, T/F, Nav flag, GS dev, GS flag, OBS, HDG card, HDG flag	N/A/ Std ARINC input	AC synchro ouput/ AC synchro output	2.8/ 3.21/3.21/8	1 yr/ C6c, C34c, C36c, C40b	Accepts standard HDG input from gyro
Aeronetics **9130** **$6,740** **—8,680**	L-R dev, T/F, Nav flag, GS dev, GS flag, OBS, HDG flag, HDG card	Some models digital incand disp of CRS & DME/ Std ARINC	AC synchro output/ AC synchro output	4.5/ 3.975/3.975/8.120	1 yr/ C6c, C34c, C36c, C40b, C66a	Accepts standard ARINC gyro inputs from 9100 gyro or other standard gyro; DME accepts ARINC 568 or King serial
Astronautics **P/N 125810** **On request**	Disp hdg, 2 brg, hdg select course, DME, GS	HSI 5"/ Yes	Yes/ Yes	6.5/ 4.25/5/7.5	1 yr or 1,000 hrs/ Yes	Typical of 5" HSIs, many others available
Astronautics **P/N 127450** **On request**	Disp hdg, 2 brg, hdg select course, DME, GS	HSI 4"/ Yes	Yes/	7.12/ 4.15/4.15/8.94	1 yr or 1,000 hrs/ Yes	Typical of 5" HSIs, many others available
Astronautics **P/N 132370** **On request**	Disp hdg, 1 brg, hdg select course, DME	HSI 3"/ Yes	Yes/ Yes	6/ 3.25/3.25/8.60	1 yr or 1,000 hrs/ Yes	Typical of 5" HSIs, many others available
Collins **EHSI-74** **$19,085** **$20,530**	VOR/LOC/GS/HGD/VLF, Omega, Loran	Color CRT Yes	HDG, Course error Yes	N/A 4.2/4.2 9.5/	1 yr/ Caps avail. C6c, C40b, C52a	More than 600 systems in operation, avail in several I/O configurations. Rose, ARC, & Map modes.
King **KCS 55A** **$6,190**	VOR/GS/LOC	Deviation needle/ KNS80, 81, KN53, KX155, 165, 175B, KNR634/ Yes	Yes/ Yes	9.4/ 3.25/3.25/7.5	1 yr p&I/ Yes	Incl remote electric gyro. Opt helicopter HSI avail w/xtra GS dampening. Opt HSI avail w/heading bootstrap. Price incl total slaved compass system
King **KPI 552** **$9,805**	VOR/GS/LOC	Deviation needle/ KNR 665A, 634, KN 53, KX155, 165, 175B, KNS 80, 81, 81-30/ Yes	Yes/ Yes	5.0/ 3.75/4.25/8.75	1 yr p&I/ Yes	Requires remote compass input. Flavors avail with or without built-in RMI pointers.
King **KPI 552B** **$11,330**	VOR/GS/LOC	Deviation needle/same as KPI 552 but incls 3 wire ("XYZ") course slew for use w/nav mgmt sys, such as KNS 660	Yes/ Yes	5.0/ 3.75/3.25/7.5	1 yr/p&I/ Yes	Requires remote compass input. 3 wire ("XYZ") RMI only.
King **KPI 553A** **$11,845**	VOR/GS/LOC	Deviation needle, dig DME dist, grd spd, TTS radar alt/ KNR 665A, 634, KN 53, KX 155, 165, KNS 81, 81-30/ Yes	Yes/ Yes	5.5/ 4.25/4.25/8.75	1 yr p&I/ Yes	Incl dig readout dist, grdspd, TTS or radar alt; req remote compass input
King **KPI 553B** **$13,610**	VOR/LOC/GS/RMI/Long range NAV	Deviation needle, dig DME, dis, grdsp, TTS, radar alt/ KNS 660	Yes/ Yes	5.5/ 4.25/4.25/9.25	1 yr p&I/ Yes	Requires remote compass input, expanded dis readout for long range navigation system
Sperry **RD-450** **On request**	VOR, LOC, GS, slaved gyro	N/A/ Yes	Yes/ Yes	3.6/ 4.06/4.06/8.66	1 yr/ Yes	N/A
Sperry **RD-550** **On request**	VOR, LOC, GS, slaved gyro	Dig DME, crs, RMI pointer/ARINC 561, 568, DME	Yes/ Yes	5.9/ 4.25/4.25/8	1 yr/ Yes	Local & remote controls available
Sperry **RD-650** **On request**	VOR, LOC, GS, slaved gyro	Dig DME, crs, RMI source sel; NAV source annun/ ARINC 561, 568, DME	Yes/ Yes	7.3/ 5.4/25/9	1 yr/ Yes	Local & remote controls available

Navigation *Long range navigation systems*

Manufacturer/Model Price	Input (VDC/amps)	Frequencies	No. of waypoints stored Type of display	Functions	No. of components/Installation	Weight/Panel size (H) (W) (D)	Warranty/TSO	Remarks
Offshore Advanced Navigation 7000 $20,950	28 VDC/ 1.5a	100 KHz	200/ Fiber optic	Cross chain Ops., Flt. Plan computer, Auto Wind Computation, Pseudo Vortac mode, 99 route storage	3/ Remote	20/ 4.5/5.75/ 6.50	1 yr/ Yes C60a	IFR Cert enroute & terminal for NAS including Alaska. EFIS compatible.
Arnav R-60 $9,495	10-35/1	100 KHz	200/ Alpha-numeric	All chains, brg/dis btwn WP, OBS mode, pres pos, dis/brg, trk/dtk, GS/ETE, auto MAGVAR, CDI sens, x range sel, man, triad sel, 200 WP	Rcvr, ctrl disp, preamp, ant/ Ctrl disp panel	CDU: 2.06 REC: 5.375 3.75/5.75/ 5.12	18 mth./ pend	Designed for helicopter install, IFR cert pend, VFR ext range mode opt for marginal Loran areas. Alpha/num disp.
Arnav R-40 $4,995	10-35/1	100 KHz	200/ Alpha-numeric	All chains, rt plan, OBS mode, pres pos, grd trk/spd, dis/time, xtrk/dtk, brg/dis, partrk, auto MAGVAR, CDI sens, hld mode, 200 WP, alpha/num disp	Unit/preamp/ antenna/ Panel	4.8/ 3.25/6.25/ 10.7	18 mth./ Yes	IFR cert, VFR ext range mode opt for marginal Loran areas; NMS opt. Interface to silver fueltron
Arnav R-21DMS $3,995	10-35/1	100 KHz	150/LCD	Includes DMS, NMS, MSA, MESA. Brg/dis to WP, all chains, GS/ETE, TK/DTK, auto MAGVAR, int CDI, 200 WP, alpha/num disp	Unit, preamp, ant/panel	5.1/ 3.25/6.25/ 10.7	18 mth./	DMS provides 10,000 airports, VOR's & NDB's in permanent memory accessed by keying in 3 letter FAA designator. Also gives ATIS, tower or unicom and navaid freq; airport and navaid elevation; whether airport is IFR or VFR.
Arnav R-21 NMS $3,195	10-35/1	100 KHz	200/LCD	DMS, and extended rge are opt. R-21 NMS unit includes wind aloft, true airspeed, absolute fuel rge and remote ranging. Brg/Dis to WP, all chains, GS/ETE, TK/DTK, auto MAGVAR, int CDI, 200 WP, alpha/nun disp	Unit, preamp, ant/panel	4.6/ 3.25/6.25/ 10.7	18 mth./	R-21 model also avail w/out NMS (winds aloft, true airspeed, absolute fuel range and remote ranging) at $2,795. list price
Canadian Marconi CMA-734 'Alpha' $32,421	18-32/2	10.2, 11.3, 13.6 KHz + 15-30 KHz VLF	4000/ 2-line Alpha-numeric	All norm nav parameters displayed, autopilot coupling & XTRK dev outputs std, perm memory keep-alive for WP & GMT/DATE clock	2 + ant/ N/A	20.5/ 4.5/5.75/ 6.125	38 mth./ Yes	SAR, Co. rts, etc., stores up to 99 WP/rt, RPU has internal VLF. TAS input std but not required. Withstands high vibra level, allowing hard mount in most helicopters
Canadian Marconi CMA-734 'Arrow' $22,440	81-32/1.5	10.2, 11.3, 13.6 KHz + 15-30KHz VLF	891 (99 x 9)/ LCD	All norm nav parameters displayed, autopilot coupling & XTRK dev outputs std, perm memory keep-alive for WP & GMT/DATE clock	2 + ant/ N/A	17.7/ 3.75/5.75/ 2.375	38 mth./ Yes	Stores 99 rts of 9 WP ea, RPU has int VLF, withstands high level vibrations allowing hard mount in most helicopters, wide angle CDU, TAS inpt std, not req, ded hi-cont disp
Collins LRN-85 $67,604	28/5	All VLF/Omega	99/ Dig CDU	Date, ETA, GMT, pres pos, lat/long storage, brg, dist, TTW, desired trk, xtrk wind, non-volatile WP memory, VOR/DME offset, AP l & r deviation, ARINC BCD output grd spd & dist	3/ Remote	31.5/ 4.5/5.75/6.25	1 yr./ C94	Omega unique for fast sync & all freq for 250 nm relane; freq-agile VLF SB trk'g; data base on 56-day chg notice; yearly EPROM update; 5700 WP
Collins LRN-85T $44,848	28/5	All VLF/Omega	99/ Dig CDU	Date, ETA, GMT, pres pos, lat/long storage, brg, dist, TTW, desired trk, xtrk wind, non-volatile WP memory, VOR/DME offset, AP l & r deviation, ARINC BCD output grd spd & dist	3/ Remote	31.3/ 4.5/5.75/6.25	1 yr./ C94	Omega unique for fast sync & all freq for 250 nm relane; freq-agile VLF SB trkg
Foster RNC601 $7,400	18-32/ .75	N/A	100/ LED	VORTAC-based long rng nav w/stor cap for 26 flight plans, 100 WP & 250 pilot-programmed WP ref. Includes VNAV advisory	1/ Panel	3.25/ 3-ATI/ 10.04 D	1 yr	Interfaces w/most VOR/DME, HSI/CDI & autopilot & flight directors. Can be upgraded to LNS616
Foster LNS616 $15,225	18-32/ 1.25	All Loran-C stations + VORTAC Interface	100/ LED	Stores 26 flight plans, 100 WP and 250 pilot-programmed WP ref. Includes VNAV advisory	2/ Remote	9.25/ 3-ATI 10.04 D	1 yr/ C40b, C36c, C66b, C60a	Uses VORTAC, Loran-C or both to derive pos info. Interfaces w/most VOR/DME, HSI/CDI & autopilot & flight directors. Can be upgraded to LNS616A

Navigation *Long range navigation systems (continued)*

Manufacturer/Model Price	Input (VDC/amps)	Frequencies	No. of waypoints stored Type of display	Functions	No. of components/installation	Weight/Panel size (H) (W) (D)	Warranty/TSO	Remarks
Foster **RNC601A** **$12,700**	18-32/ .75	N/A	234/ LED	Storage cap for 26 flight plans, 234 WP and 150 pilot-programmed WP ref plus all U.S. VOR, VOR/DME & VORTAC's by lat/long, freq, mag variation and elevation	2/ Remote	3.25/ 3-ATI 10.04 D	1 yr/ C40b, C36c, C66b, C60a	VORTAC-based long rng nav w/U.S. VORTAC Database & EFIS Interface Unit (D1681). First yr database update subscription is free
Foster **LNS616A** **$20,580**	18-32/.75	All Loran-C stations + VORTAC Interface	234/ LED	Stores 26 flt plans, 234 WP & 150 pilot- programmed WP ref, plus all U.S. VOR, VOR/DME, & VORTAC's. Incl VNAV advisory & LR651 Loran-C rcvr	3/ Remote	13/ 3-ATI/ 10.04 D	1 yr/ C40b, C36c, C66b, C60a	Uses VORTAC, Loran-C or both to derive pos info. Incl VORTAC database & EFIS Interface Unit (D1681). First yr database update subscription is free
Foster **LRN500** **$2,395**	8-32/ @ 7w	Loran-C	234/LCD	Present position direct, VNAV, nearest airport, ETE, Trk error, "Take-it-home" programming feat. Position displayed in rad/dist from nearest VORTAC or in lat/long	2/ panel	2.75/ 2/6.31 11.94	1 yr./ Yes	*Includes ant/preamp. Built-in, pilot-replaceable data cartridge w/all VOR's, VOR/DME's, VORTAC's, TACAN's and hard surfaced runways over 3500'.
King **KNS 660** **$23,430**	28/1.77	200 VOR/ DME, 252 TACAN. All Omega	200-600/ CRT	Nav Mgmt Sys Great circle enroute, appr & VNAV. Man/autosel sens & WP seq. Data base incl Stores 100 flight plans/800 WP. Drives EFIS & radar graphics. Freq mgmt w/Gold Crown III	2/ Remote	22 + sensors/ 10.8/5.75/8.	1 yr p&l/ Yes	Sensors incl VOR/DME, TACAN, Omega/VLF (opt $15,370). Compat w/Honeywell laser INS, & future MLS & GPS. 2 CDU's avail. Scans up to 10 DME's for pos comp
Litton **LTR-81-01** **$42,900**	115VAC/ 400Hz	N/A	N/A Works with FMS	Dig ARINC 429-Att, mag hdg, angular rates, accel, Iner Alt. w/valid VOR/DME it provides GT, GS, DA, horiz vel, flt path angle, windspd & direction, potent vert. spd. Outputs: pitch, roll & mag hdg in analog.	1/ Rack	28.4/ N/A	1 yr N/A	Single AHRU replaces vert. gyros, instr. ampl, Body rate gyros, body accel. and compass couplers. MTBF-7,000 hrs, VG/DG instr. ampl. MTBF 1,650 hrs. Gimbals & assoc mech & elect. components eliminated enhancing maintainability
Litton **LTN-211** **$33,530**	115VAC/ 400Hz	10.2-25 KHz	9/ Dig CDU	Auto prog VLF on 4th omega freq; auto sync, station select, trk mag and true hdg, rem ranging, wind update, malfunc code readout, self-test operator error detect. Rho-Rho-Rho operation, auto GMT & date. Three freq sys avail.	2 plus ant/ Pedestal & rack	39.8/ N/A	1 yr/ ARINC 599/ 575 dig bus	HS1 synchro & dig outputs, ARINC 599 Interface/w color radar, autopilot FD & HSI, nite vision goggle capability
Litton **LTN-3100** **$19,500**	11-33/ 60w	10-30/ Omega & VLF	99 non-volatile Dig CDU	Auto sync & station select, trk, mag & true heading, rem ranging, wind update, malfunc code readout, self-test, operator error detect	2 plus E field ant/ Pedestal & rack	20/ 2.25/ 5.75/6.4	1 yr N/A	Stores up to 16 rts of 9 WP ea. Std ARINC 429 & 575 Nav data to color weather-radar nav display, integ lateral steering to autopilot. High-intensity LED, 36 char, 2 line rotatable display, rail mounts in pedestal.
Litton **LTN-91** **$115,120**	115VAC/ 400 Hz	N/A	N/A	Inertial ref sys in support of a flight-mgmt sys 3 ARINC 429 data buses provide: PP, GS, pitch roll & hdg rates, body pitch & accel rates, along trk, xtrk & vert accel, trk angle & rate, alt. wind drift ang, hdg, speeds, descrete	3/ N/A	49/ 4.5/5.75/6	1 yr/ N/A	D to A, laser gyro stabilizer strapdown inertial reference system for semi-analog aircraft ARINC 704 10 MCU configuration.
Litton **LTN-92** **On request**	115VAC/ 400 Hz 28 VDC	N/A	99-200/ Dig LED CDU	All the functions of a full inertial nav with increased computer and data storage capacity.	3/ Pedestal & rack	N/A 4.5/5.75/7.	N/A	Laser gyro stabilized strapdown inertial nav sys for semi analog aircraft. A direct replacement for existing INS units.
Litton **LTN-72RL** **$155,545**	115VAC/ 400 Hz	N/A	99 + PP/ Dig LED CDU	Auto data entry, wind blanking, var leg switching, action malf codes, parallel trk; outputs to Flt Dir, radar/autopilots, dig air data & dig VOR, & all ARINC analog TAS computers. ARINC 561 ARINC 575	3/ Pedestal & rack	62/ 4.5/5.75/ 7.6	1 yr/ C4c, C5cII, C6c	Features bulk storage of NAV data in elect alterable mem for indefinate retention w/out power, avail with Vandling interface for data base. INS & RNAV req for enrt, term and appr.
Litton **LTN-90** **$115,120**	115VAC/ 400Hz 28VDC	N/A	N/A Dig LED ISDU	Inertial ref sys in support of a flight-mgmt sys 3 ARINC 429 data buses provide: PP, GS, pitch roll & hdg rates, body pitch & accel rates, along trk, xtrk & vert accel, trk angle & rate. Alt Wind drift ang, hdg, speeds, descrete	3/ Pedestal & rack	50/ 4.5/5.75/ 6	1 yr C4c, C5c, C6c	All dig, laser gyro stabilized strapdown inertial ref sys for all dig aircraft. ARINC 704 10 MCU configuration.

David W. Evans, chief pilot
Mid-Valley Helicopters, Inc.
Jefferson, Oregon

"Our Apollo gets us work, and saves our clients money!"

II Morrow's incredible Apollo Loran C saves you money by enabling you to fly direct. And, for businesses like Mid-Valley Helicopters, it's an invaluable asset on the job! In fact, many government contracts now require Loran C.

As chief pilot David Evans reports, "We've had our Apollo for over a year. For surveying timber we record the lat-long of each photo, so later we can return to the same spot. It's accuracy is unbelievable! We also use it for finding corner boundries, reporting and verifying forest fires, game spotting, photo stripping for maps, and agricultural spraying." (Other uses include land management, search & rescue, power-/pipe- line control, law/drug enforcement).

The Apollo is easy to operate, comes with a 26 month warranty and is the smallest loran C on the market. IFR approval pending on several models. It's no wonder Apollo is the top selling loran C in the world . . . from the world's largest aviation loran C manufacturer.

LORAN C

EASY TO OPERATE!

CONTACT YOUR FAVORITE AVIONICS SHOP OR CALL TOLL FREE:

HAWKINS ASSOCIATES, INC.
Texas 1-800-792-2931
National 1-800-433-2612

EDMO DISTRIBUTING, INC.
Calif. 1-800-342-3627
National 1-800-235-3300

II MORROW INC
A PUBLICLY HELD CORPORATION
P.O. Box 13549
Salem, OR USA 97309
(503) 581-8101
TWX: 510-599-0110

Navigation *Long range navigation systems (continued)*

Manufacturer/Model Price	Input (VDC/amps)	Frequencies	No. of waypoints stored Type of display	Functions	No. of components/installation	Weight/Panel size (H) (W) (D)	Warranty/TSO	Remarks
Litton LTN-72 $139,500	115VAC/400 Hz	N/A	9 + PP Incand dig CDU	Actual trk, trk ang error, xtrk & desired trk + access to computer in-flight for great circle dist computation avionics interface is full ARINC 561 & ARINC 575	3/ Pedestal & rack	61/ 4.5/5.75/7.6	1 yr C4c, C5cII, C6c	Sys uses gyro-stabilized platform to sense AC accelerations. Outputs accurate pres pos (Lat/Lon) data, nav infor, steering commands & ang pitch, roll & hdg data.
Litton LTN-72R $141,770	115VAC/400 Hz	N/A	9 + PP Incand Dig CDU	RNAV cert for enrt, term & appr. Provides xtrk gnd spd, pos of both updated & unupdated WP, VORTAC pos, freq, & elevation update code, mag var, DTG, DT, status, self test, malf codes. Access to computer during flight.	3/ Pedestal & rack	61/ 4.5/5.75/7.6	1 yr C4c, C5cII, C6c	ARINC 561 & 575. May be operated as RNAV or as an INS. As an area NAV sys, using range & brg data from sel VOR/DME/DME stations, it provides highly accurate navigation independent of time & drift errors.
II Morrow Apollo I 602 $1,295	6.5-48/1.54-.21	100 KHz	200/ LED numeric	Rng & brg to,from & betweenWP, gnd trk ang, gnd spd, est time enrt, xtrk error	2/ Panel	3.75/ 2/6.25/11	26 mo Yes	Compact, only 2" panel height req. Video training film avail. Complete w/A-16 ant.
II Morrow Apollo II 611 $2,495	6.5-48/2.31-.31	100 KHz	100/ Hi- int alpha numeric	Brg (true or mag), rng, trk ang, gnd spd, est time enrt, xtrk error, desired trk, brg & rng from orig, pres pos, auto mag/var, CDI output, lat/long cal, auto secondary	2/ Panel	3.75/ 2/6.25/11	26 mo Yes	Enter pres pos in any WP, only 9 controls, wide input voltage range, simple operation. Complete w/A-16 ant.
II Morrow Apollo II 612 $3,495	6.5-48/2.31	100 KHz	2500 + Hi-int alpha numeric	Pre-prog WP sel, brg & rng to & from WP, gnd trk ang, gnd spd, est time enrt, xtrk error, desired trk, pres pos auto mag/var, CDI output, lat/long cal, auto secondary	2/ Panel	3.75/ 2/6.25/11	26 mo Yes	Contains "Flybrary" 5 yr non-volatile mem, simplified controls, selectable parallel offset, IFR pending
II Morrow Apollo II 612B $2,795	6.5-48/2.31-.31	100 KHz	2500 + Hi-int alpha numeric	Pre-prog WP sel, brg & rng to & from WP, gnd trk ang, gnd spd, est time enrt, xtrk error, desired trk, pres lat/long cal, auto secondary, emerg. search	2/ Panel	3.75/ 2/6.25/11	26 mo Yes	VFR only, contains "Flybrary" 5 yr non-volatile mem, simplified controls, selectable parallel offset, complete w/A-16 ant.
II Morrow Apollo II 614P $5,995	6.5-48/2.54-.33	100 KHz	2500 + Hi-int alpha numeric leds	All functions of Model 612 including emerg. search. Has added heavy iron features of "V-NAV," "Nat. Flybrary," and "Flight plan."	2/ Panel	3.75/ 2/6.25/11	26 mo Yes	Complete w/high speed blade ant.
II Morrow Apollo II 614R $7,995	6.5-48/2.54-.34	100 KHz	2500 + Hi-int alpha numeric leds	All functions of Model 612 including emerg. search. Has added heavy iron features of "V-NAV," "Nat. Flybrary," and "Flight plan."	3/ Remote	CDU 1.51/ 2.25/5.0/4.6 RCU 2.76/ 6.3/1.8/11.25	26 mo Pending	Remote mounted RCW, compact CDU w/dzos rail mounting. Complete w/A-17 high speed blade ant.
Teledyne TDL-711A $11,950	9-36/2	100 KHz	75/ Gas disp	Std nav outputs; dist, brg, xtk, dtk Lot, Lou, WP, plus master indep operation, flight planning, rad/dist WP input, LOFF data link	2/ Rack & panel	15/ 4.15/5.75/6.5	12/18 mth/ Submitted	LOFF compatible data link & ARINC 571 bus are standard features of the TDL-711A. RS-232 data bus is an optional feature.
Texas Inst. TI9100 $3,995	11-33/.9 (28V)	100 KHz	9/ Gas disp	Lat/long, range, radial & brg, xtrk error, gnd trk angle, gnd spd, ETA, ETE, parallel offset, crs & dist btwn WP, trip dist, auto WP seq, auto triad sel & mag var	1/ Panel	6.7/ 3.25/6.25/11.6	1 yr/ C60a	IFR Cert, TI 91 rem mntd model, $7,995. TI 91 drives Sperry Data Nav III. Both drive most A/P's. Local calib & auto notch filt std.
Texas Inst. TI9100A $4,795	11-33/.9 (28V)	100 KHz	40/ Gas disp	Lat/long, range, radial & brg, xtrk error, gnd trk angle, gnd spd, ETA, ETE, parallel offset, crs & dist btwn WP, trip dist, auto WP seq, auto triad sel & mag var	1/ Panel	6.7/ 3.25/6.25/11.6	1 yr/ C60a	IFR Cert, has 4 sep flt plans
Texas Inst. TI9200 $2,996	11-40/.9(28V)	100KHz	100/ (305 VOR index) Gas disp	220 WP flt pln w/rev, Electronic RMI shows dist/rad pos from any WP, ASF, intCDI w/ sel resolution, Auto mag var	2/ Panel	Rcvr 4.5/ Preamp .5 3.25/ 6.25/11.6	1 yr/ C60a	IFR cert, one touch "fly direct" extended range capability drives ext CDI, HSI, AP. Local calib & auto notch filt. std.
Tracor TA 7880 $22,500	28/1.25	All Omega/VLF	400/ Color/CRT 8-line 14 char per line	Auto date, GMT, pos (lat/long), sync & stat/freq select. Brg hdg dist desired trk, trk, xtrk, selected xtrk, TAS, GS, ETA, ETE, wind, DA, pseudovor (rng/brg offset) - drives HSI/CDI/Flt director.	3/ Remote	16/ 3.75/5.75/8.0	2 yr p&l/ Yes	All enrt nav info single disp pg. Use of color eliminates disp clutter. Fully alphanumeric keybd. Non-volatile mem stores up to 99 flt plans, 30,000 WP data base. Plain lang diag for sys status and inst ck/out. IFR cert.

Navigation *Long range navigation systems (continued)*

Manufacturer/Model Price	Input (VDC/amps)	Frequencies	No. of waypoints stored Type of display	Functions	No. of components/installation	Weight/Panel size (H) (W) (D)	Warranty/TSO	Remarks
Universal Navigation UNS-1 $48,400	19-28/2	All Omega/ VLF & 100 KHz (for sensors)	6,900 std + 23,000 opt/ CRT/CDU	Int flt mgmt sys, lat plus vert nav, fuel mgmt, Int Jeppesen data base, analog/digital flt guidance sys, radar outputs	2/ Remote w/pedestal display	14.5/ 4.5/5.75/6.75	3 yr/ C-66B/ C-94A	Accepts single or multiple inertial, Omega/VLF and/or Loran C sensor inputs, plus cont automatic DME/DME lat/lon. Prod one best comp pos, 100 rt storage, In cockpit data base updating, Radio tune opt
Universal Navigation UNS-1JR $29.250	19/28V/1.6	All Omega/ VLF & 100 KHz (for sensors)	6,900 std CRT/CDU	Int Nav Mgmt sys, lat plus vert nav, (advisory only), fuel mgmt. (manual), Int Jeppesen data base, analog/dig flt guidance sys, radar waypts	2/ Remote w/pedestal disp	12.75/ 4.5/5.75/6.75	3 yr C-66b/ C-94a	Accepts single or multitude inertial, Omega/ULF and/or Loran C sensor inputs, plus continuous auto DME/DME lat/long. Produces one best computed position, 100 rte storage, in-cockpit data base updating. Radio tune opt avail

Navigation *Marker beacon receivers*

Manufacturer/Model Price	Input (VDC/amps)	Features included	Type indication	Installation	Weight	Panel size (H) (W) (D)	Warranty	TSO	Remarks
Collins MKR-350 $435	14, 28/0.3	Hi & lo sens ctrl	Tone, lites	Panel	0.6	1.0/3.1/5.7	1 yr	C35d	N/A
King KMR 675 $1,215	28V/1.2 –	Self-test, auto dimming	Tone, lights	Remote	.75	2.6/1/9.1	1 yr	C35d	KA 35A marker light assembly, $170
King KR 21 $495	14/28V/.30	Auto dimming of bit-in lites, hi-lo sense switch bit-in	3 lites + audio outputs	Panel	0.60	1.05/3.2/5.667	1 yr p&l	Yes	Separate, self-contained unit, includes lights
King KR 22 $385	14/28V/.5	Bit-in hi-lo lite intensity switch. MKB	3 lites + audio outputs	Panel	.40	1.2/3.3/7.75	1 yr p&l	No	Self-contained unit, momentary lite test when turned on. Includes lights

Navigation *Radio magnetic indicators*

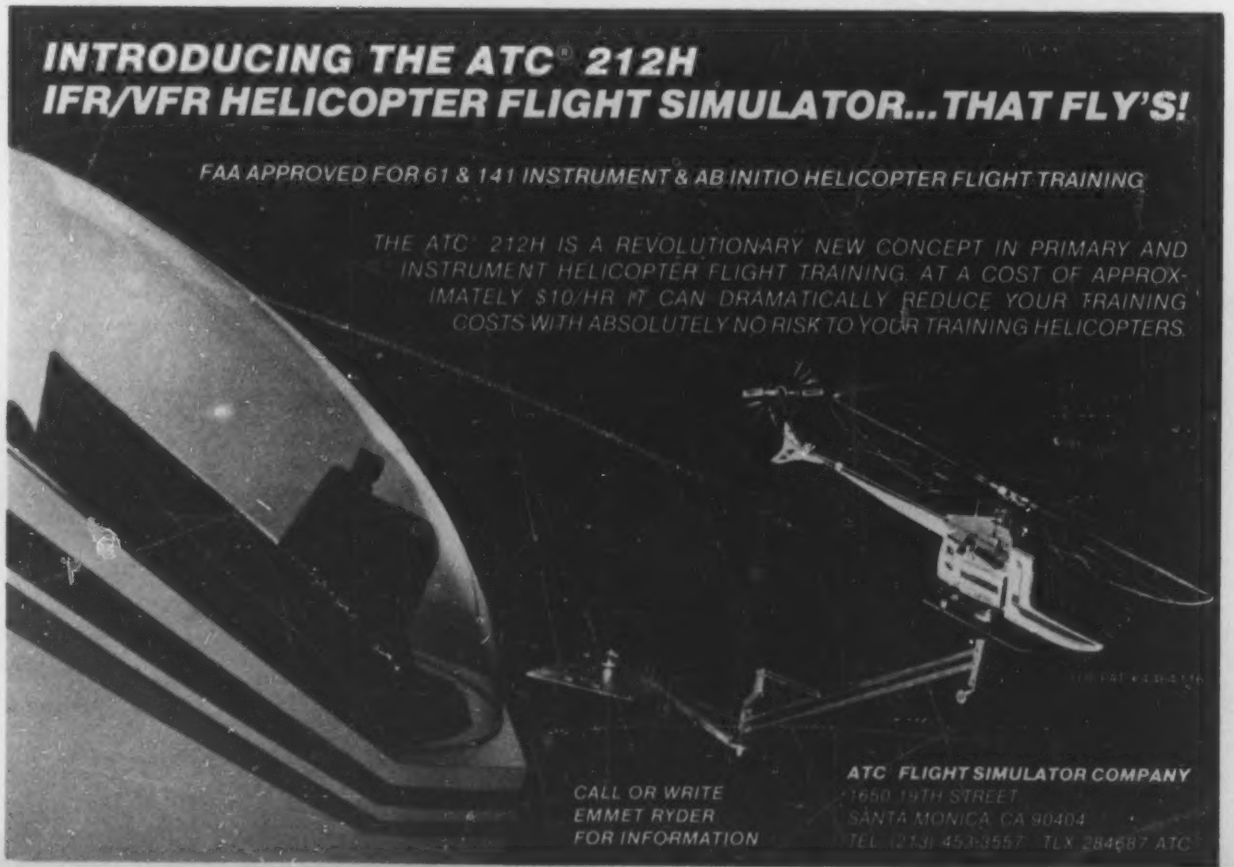
Manufacturer/Model Price	Input (VDC/amps)	No. of pointers Internal RMI converter	Switching capability	Display features	Installation	Weight/Panel size (H) (W) (D)	Warranty/TSO	Remarks
Aeronetics 3137 $3,480	28VDC/0.5, 26VAC/0.5	2/ No	Yes, 2 VOR, 2 ADF	Color coded switches & pointers, hdg flag	Std ARINC ATI-3 per 408	2.5/ 3.21/3.21/6.7	2 yr./ C6c	3100 avail in various config to accept any radio outputs. Also avail w/o switches
Aeronetics 7100 $4,760	28/ 1.1	2/ Yes	Yes, 2 ADFS, 2 VORS	Color coded switches & pointers, hdg flag	Remote box	4.3/ 3.21/3.21/ 3.83	2 yr/ C6c	Accepts VOR comp & x,y,z, or DC SIN/COS ADF, opt AC inverter provides sys AC power
Aeronetics 3337 $3,780	28/ .75	2/ No	Yes, 2 VOR, 2 ADF	Color coded switches & pointers, hdg flag	Std ARINC AT1-3 per 408	2.5/ 3.21/3.21/ 7.56	2 yr/ C6c	Accepts: ADF x,y,z or DC SIN/COS ± 3V or ± 8V, VOR xyz or AC SIN/COS sq wave
Aeronetics BDI-303A $12,000	28/ .75	2/ No	Yes, 2VOR, 2ADF	Dual VOR/ADF, Dual DME distance DME hold freq	ATI 3 × 4	3.5/ 4.0/3.0/ 7.0	2 yr./ C6c/C66b	Full ARINC 428 interface, Standby compass mode with flux valve input

Navigation Radio magnetic indicators *(continued)*

Manufacturer/Model Price	Input (VDC/amps)	No. of pointers Internal RMI converter	Switching capability	Display features	Installation	Weight/Panel size (H) (W) (D)	Warranty/TSO	Remarks
Astronautics P/N 127700 On request	115/400 Hz	2/ No	Yes	N/A	N/A	2.2/ 3.25/3.25/5	1 yr or 1000 hrs/ Yes	Hermetically sealed, anti-reflective glass
Astronautics P/N 134650 On request	115/400 Hz	2/ No	No	All servos, 3 fail flags	ARINC ATI-3	3.5/ 3.25/3.25/7.5	1 yr or 1000 hrs/ Yes	Bootstrap azimuth output, DC SIN/COS input ADF, AC SIN/COS VOR input
AIM 400CEL $4,295	14/28VDC/.9 115VAC/ 400HZ/16VA	0/ N/A	No	HDG	Panel	3.8/ 3.26/3.38/ 8.70	1 yr C6c	Has ARINC bootstrap synchro, avail in airdriven system
AIM 800CEL(D) $5,045	14/28VDC/.9 115VAC/ 400HZ/16VA	2/ N/A	No	HDG/RMI ADF	Panel	3.8/ 3.26/3.38/ 8.7	1 yr C6c	Has ARINC bootstrap
AIM 800CEL(S) $4,845	14/28VDC/.9 115VAC/ 400HZ/16VA	1/ N/A	No	HDG/RMI	Panel	3.8/ 3.26/3.38/ 8.7	1 yr C6c	Has ARINC bootstrap Synchro, avail in airdriven system.
Collins BDI-36 $5,305	28/0.8	2/ N/A	ADF, VOR	Dual DME dist disp; pushbutton switch of pointers to ADF/VOR	Panel	3.5/ 4.2/3.4/7.3	1 yr/ C6c	Accepts SIN/COS or 3-wire synchro ADF & VOR inputs; pointers independent use split 400 Hz power sources; opt bootstrap compass xmtr; integral power supply & servo amp
Collins RMI-30 $3,800	28/0.6	2/ N/A	ADF, VOR	Pushbutton pointers switch ADF/VOR	Panel	2.8/ 3.4/3.4/7.3	1 yr/ C6c	Accepts 3-wire synchro ADF input & SIN/COS VOR input; bootstrap compass xmtr; integral power supply & servo amp
Collins RMI-36 $5,395	28/0.6	2/ N/A	ADF, VOR	Pushbutton pointers switch ADF/VOR	Panel	2.8/ 3.4/3.4/7.3	1 yr/ C6c	Accepts SIN/COS or 3-wire synchro ADF & VOR inputs; pntrs independent use split 400 Hz power sources; opt bootstrap compass xmtr; integral power supply & servo amp
King KI 229 $3,330	14/28/0.75	2/ Yes	Can switch fr VOR to #2 ADF w/ext switch	Separate needle for ADF & VOR	3" round or front-mtd in 3 ATI	2.8/ 3.26/3.26/ 8.33	1 yr p&l/ Yes	Requires 4.0 VA-26VAC power + 14 or 28 VDC. Requires bootstrap from HSI
King KDI 582 $4,095	28/0.4	2/ Yes	Yes	Needles switch betw ADF, VOR	Front avail in 3 ATI hole	3.0/ 3.26/3.26/ 8.38	1 yr p&l/ Yes	Req 6.0 VA-26 VAC power + 28 VDC. Accepts AC or DC sin/cos, serial & VIR composite inputs
Sperry RH-404 On request	28/5.6	2/ No	No	HDG, RMI	Panel	3.2/ 3.2/3.2/6.5	2 yr/ Yes	N/A
Sperry RH-405 On request	28/5.6	2/ No	No	HDG	Panel	3.2/ 3.2/3.2/6.5	2 yr/ Yes	N/A
Sperry RH-444 On request	28/5.6	2/ No	Yes	HDG	Panel	3.2/ 3.2/3.2/6.5	2 yr/ Yes	N/A
Sperry RH-445 On request	28/5.6	2/ No	Yes	HDG	Panel	3.2/ 3.2/3.2/6.5	[illegible]	N/A

Navigation *VHF comm/nav transceivers*

Manufacturer/Model Price	Input (VDC/amps) Output (watts)	Frequency range Spacing (KHz)	No. of channels	Component independence	Features included	Installation	Weight/Panel size (H) (W) (D)	Warranty/TSO	Remarks
King KX 155 $2,775	14/28/ 14V-7.5 28V-4.5/ 10	118.-135.975 Com 25 KHz Nav 50 KHz	Com 720 Nav 200	Yes	Dig disp of act/sby freq & freq flip-flop of both Nav & Com audio leveling	Panel	5.3/ 2./6.25/ 10.16	1 yr p&l/ Yes	Incl install kit. Many versions avail. Opt incl GS, audio amp, & wider Com rcvr bandwidth for int'l use. Rem Nav & Com flip-flop opt
King KX 165 $4,205	14/28/ 14V-7.5 28V-4.5/ 10	108.-135-975 Com 25 KHz Nav 50 KHz	Com 720 Nav 200	Yes	Dig disp of act/sby Com & Nav freq, flip-flop of act/sby freq, dig radial disp aud-level	Panel	5.65/ 2./6.25/ 10.16	1 yr p&l/ C37b	$4,6805w/GS; non-volatile memory. Remote Nav & Com flip-flop capability
King KX 175B $2,660	14/28/5.1/ 7	108.-135.975 Com 25 KHz Nav 50 KHz	Com 720 Nav 200	Yes	Mechanical tuning & rotary drum display	Panel	7./ 2.5/6.25/ 13	1 yr p&l/ Yes	28V req conv; Avail w/narrower or under-Com rcvr bandwidth for int'l use
Narco MK 12D $2,595	14 or 28/ 1 @ 14, .5 @ 28/ 8 nom	108.-135.975 Com 25 KHz Nav 50 KHz	Com 720 Nav 200	Yes	Simultaneous disp of ACT & standby freq	Panel	4.1/ 2.5/6.25/ 11	1 yr, 2 yr opt/ C34c, C36c, C37b, C38b, C4a	Incl blt-in VOR/LOC conv & DME chan (2x5) use w/ ID-824, 825, or IDME-891 + $[illegible]00 for GS
Narco HT-830 $695	9.5V/ 2 watt/ 2(6pep)	108.-135.975 Com 25 KHz Nav 50 KHz	Com 720 Nav 200	No	Built-in digital	None Hand-held port	2./ 2.5/6.25/ 11	1 yr/ No	Ideal for emergency back-up



INTRODUCING THE ATC® 212H
IFR/VFR HELICOPTER FLIGHT SIMULATOR...THAT FLY'S!

FAA APPROVED FOR 61 & 141 INSTRUMENT & AB INITIO HELICOPTER FLIGHT TRAINING

THE ATC® 212H IS A REVOLUTIONARY NEW CONCEPT IN PRIMARY AND INSTRUMENT HELICOPTER FLIGHT TRAINING. AT A COST OF APPROXIMATELY $10/HR IT CAN DRAMATICALLY REDUCE YOUR TRAINING COSTS WITH ABSOLUTELY NO RISK TO YOUR TRAINING HELICOPTERS.

CALL OR WRITE
EMMET RYDER
FOR INFORMATION

ATC® FLIGHT SIMULATOR COMPANY
1650 19TH STREET
SANTA MONICA, CA 90404
TEL. (213) 453-3557 TLX 284687 ATC

Navigation *VHF navigation receivers*

Manufacturer/Model Price	Input (VDC/amps)	Frequency range (MHz) No. of channels	Spacing (KHz)	Capabilities	Features included	Recommended CDI: Model Weight/Price	Installation/Weight Panel size (H) (W) (D)	Warranty/TSO	Remarks
Bendix VNS-41A $8,600	18-33/.8	108.-117.95/ 200	50 KHz	GS & MKB std.	Dig RMI readout Dichroic display	Any std type	Remote/ 6.1/ 4./4./11.	2 yr/ C40b, C36c, C34c, C35d	ARINC 429 interface/analog; AC/DC SIN/COS output, Rad/Brg digital readout; Also tuned by FMS
Collins VIR-30A $14,010	28/0.8	108.-117.95/ 200	50 KHz VOR/LOC, 150 KHz GS/MKB	GS & MKB	2 storable chan, non-volatile memory; gas/disp	RMI-30/ 2.8/ $3,800	Remote/ 6.8/ 3.13/2.5/ 6.5	1 yr/ C34c, C35d, C36c, C40a	RMI compatible; incl CTL-30 elect ctrl; 4 wire SIN/COS VOR output
Collins VIR-31A $15,335	28/0.8	108.-117.95/ 200	50 KHz VOR/LOC, 150 KHz GS/MKB	GS & MKB	2 storable chan; non-volatile memory; gas/disp	RMI-36/ 2.8/ $5,395	Remote/ 8.0/ 3.13/2.5/ 6.5	1 yr/ C34c, C35d, C36c, C40a	RMI compatible; incl CTL-30 elect ctrl; 3 wire synchro VOR output; rotor modulation filt
Collins VIR-32 $11,510	28/1.5	108.-117.95/ 200	50 KHz VOR/LOC 150 KHz GS/MKB	GS & MKB	6 storable chan, non-volatile memory; gas/disp	RMI-30/ 2.8/ $3,800	Remote/ 5.7/ 2.63/2.38/ 5.39	1 yr/ C34c, C35d, C36d, C40b	Repl VIR-30A directly; RMI comp; incl CTL-32 serial dig ctrl; dig signal processing; blt-in diag; rotor modulation filter opt (strap)
Collins VIR-351 $2,305	14, 28*/ .08 (14V)/	108.-117.95/ 200	50 KHz	Tunes an ext GS receiver & DME	Incand disp	IND-350A 1.5/ $985	Panel/ 2.7/ 2.6/3.12/ 12.45	1 yr/ C36c, C40a	Disp either freq or TO/FR, brg; elect freq readout; ARINC 547; *Adapter $75
King KN 53 $2,715	14 or 28V/ 1 (14V), .25 (28V)	108.-117.95/ 200 NAV, 40GS	150 GS	VOR, LOC, GS, RMI	Act & stby, GS rcvr, DME chan	KI209/ 1.20 $800	Panel/ 3.1/ 1.3/6.25/ 9.75	1 yr/ C36c, C40a	Angular deviation, int lighted. Opt KN53 avail w/out glide slope avail
King KNR634 $10,895	28V/ 2.5	108.-117.95/ 200 NAV, 40 GS	140 GS	VOR, LOC, GS, RMI, MKB	Act & stby freqs, GS rcvr, MKB rcvr, flip-flop (incl rem)	KI206/ 1.3/ $1,395	Remote/ 3.25/3.25/8	1 yr/ C34c, C36c, C40a	Rectilinear needle movement, int lighted, course datum synchro add $345. Opt less GS. Opt cont head for freq Mgmt for KNS660 and 9 pilot-programmable freq. storage.
King KNR6030 $10,732	28VDC, 115VAC/ 1.5, 0.1	108.-117.95/ 200	50 KHz	ARINC 547	Incls glide slope, module design, funct test feature	KI206/ 1.3/ $1,340	Remote/ 11.9/ Stand ARINC ½ ART sht	1 yr/ p&I Yes	Opt Sin/Cosin avail for RMI and OBI mounting rack and connector avail for $844.
Narco NAV-824 $1,895	11-32/ .5	108.-117.95/ 200	50 KHz	VOR/LOC/ digital RMI both to & fr station	Act & stby freq, DME chan	ID-824/.9/ $750	Panel/ 3.1/ 1.5/6.25/ 11	1 yr, 2 yr opt	Gas discharge disp, rectilinear needle movement
Narco NAV-825 $2,395	11-32/ .5	108.-117.95/ 200	50 KHz	VOR/LOC/GS digital RMI both to & fr station	Act & stby freq, DME chan	ID-825/ 1.0/ $850	Panel/ 3.3/ 1.5/6.25/ 11	1 yr, 2 yr opt/ C34c, C36c, C40a	Gas discharge disp rectilinear needle movement

No postage
necessary if mailed
in the United States

BUSINESS REPLY MAIL
FIRST CLASS PERMIT NO. 6948 Alexandria, VA

Postage will be paid by

Helicopter Association International
1619 Duke Street
Alexandria, VA 22314-3406

HAI Membership Information

Yes, I would like to become a member of the Helicopter Association International.
Please send me complete information and an application for the following membership category.

☐ **Regular** — Corporation or company that owns and operates helicopters.
☐ **Associate** — Manufacturers, suppliers and service organizations that support the helicopter industry.
☐ **Sustaining** — Individuals interested in following industry events (not otherwise eligible).
☐ **Student**

Name ______________________ Title ______________
Company ______________________
Address ______________________
City ______________________ State __________ Zip __________
Country ______________________
Telephone ______________________ Telex/TWX ______________
Principal Business/Occupation ______________________

No postage
necessary if mailed
in the United States

BUSINESS REPLY MAIL
FIRST CLASS PERMIT NO. 6948 Alexandria, VA

Postage will be paid by

Helicopter Association International
1619 Duke Street
Alexandria, VA 22314-3406

Annual Meeting Information

☐ *I am interested in participating in the 1987 HAI Annual Meeting & Industry Exposition in Dallas, Texas.*

☐ Please send me Exhibitor information.

☐ Please send me meeting Registration and Reservation information for regular registrants.

Name ______________________ Title ______________
Company ______________________________
Address ______________________________
City ______________________ State ________ Zip ________
Country ______________________________
Telephone ______________________ Telex/TWX ______________

No postage necessary if mailed in the United States

BUSINESS REPLY MAIL
FIRST CLASS PERMIT NO. 6948 Alexandria, VA

Postage will be paid by

Helicopter Association International
1619 Duke Street
Alexandria, VA 22314-3406

Helicopter Annual Information

☐ I am interested in advertising in the 1987 edition of the award winning *Helicopter Annual.* Please send me a rate card and media kit.

☐ I need additional copies of the *1986 Helicopter Annual.* Please send me ____ copy(ies). I have enclosed $____________. Member cost: $20, non-member cost: $35. Shipping per book: $3.

I have enclosed ☐ check or money order or please charge to my ☐ AMEX ☐ MasterCard ☐ Visa
Card No. ______________________ Expiration date ____________

Name ______________________ Title ______________
Company ______________________________
Address ______________________________
City ______________________ State ________ Zip ________
Country ______________________________
Telephone ______________________ Telex/TWX ______________

Weather detection *Thunderstorm detection systems*

Manufacturer/Model Price	Input (VDC/amps)	Ranges (nm)	Scan width (°)	Display type/size	Weight/Panel size (H) (W) (D)	Warranty/TSO	Remarks
3M Stormscope WX-12 **$11,975**	30-15/1-2/28w	Control by radar display, out to 200 nm	360° in radar stby mode	Integrated with radar display	8.0/1.46/3.19/2.5	1 yr/Pending	Interface with Sperry Coloradar. Retrofittable on existing primus systems
3M Stormscope WX-11 **$10,500**	30-10/1-2/28w	25, 50, 100, 200	360°	CRT 3'' dia	10.7/3.19/3.19/9.22	1 yr/Pending	Features incl hdg stab, image enhancement circuitry; max range on ground or in air, forward mode, all controls on disp, range memory, select gyro on/off line
3M Stormscope WX-10A **$8,950**	30-10/1-2/28w	25, 50, 100, 200	360°	CRT 3'' dia	10.3/3.19/3.19/9.22	1 yr/Pending	Features incl image enhancement circuitry; max range on ground or in air, forward mode, all controls on disp, range memory
3M Stormscope WX-8 **3,975**	30-10/.51	100	135°	LCD 3'' dia	4/3.19/3.19/9.22	1 yr/N/A	Max range on ground or in air, single panel mounted unit/display; 3 color LCD

Weather detection *Weather radar*

Manufacturer/Model Price	Input (VDC/amps) Output (kw)	Ranges	Antenna diameter/type	Scan width (°)/Scans per min	Display type/size	Pulse width	Weight/Panel size (H) (W) (D)	Warranty/TSO	Remarks
Bendix RDR-160 **$12,450**	28/3.5/5.0	10, 20, 40, 80, 160	10'', 12''/parabolic	90/13	Mono/4.34 x 3.33	4.0 usec	15.6/4.0/6.25/9.97	2 yr/C63b	Monochromatic sys, non-stabilized
Bendix RDR-160XD **$14,550**	28/4/5.0	10, 20, 40, 80, 160, 240	10'' or 12''/parabolic	90/13	Color/4.34 x 3.33	4.0 usec	20.6/4.7/6.25/12.06	2 yr/C63b	Optional check list, moving map disp, non-stablized
Bendix RDR-1150XL **$36,400**	28/4.5/10	5, 10, 20, 40, 80, 160, 240, 320 nm	12'', 18''/flat plate	120/13	Dot matrix color/4.34 x 3.33	1.2/3.5 usec	28.5/4.45/6.25/12.06	2 yr/C63b	Low profile, fully stabilized sys. Opt check list & moving map display
Bendix RDR-1150HP **$35,250**	28/4.5/10.0	5, 10, 20, 40, 80, 160, 240, 320 nm	12'', 18''/flat plate	120/13	Dot matrix color/4.34 x 3.33	1.2/3.5 usec	28.5/4.7/6.25/12.06	2 yr/C63b	Fully stabilized sys. Opt check list & moving map display
Bendix RDR-1400C **$49,790**	28/4.2A/10.0	0.5, 1, 2, 5, 10, 20, 40, 80, 160, 240	12'', 18'' or 12 x 18''/flat plate	120/13	Dot matrix color/4.34 x 3.33	0.5/2.35 usec	34/6.25/6.25/10.87	2 yr/C63b	BEANCON radar; opt check list, moving map, course brg cursor
Bendix RDS-82 **$16,600**	28/4.0/1.2	10, 20, 40, 80, 160, 240 nm	10'' or 12''/flat plate	90/13	Color/3 x 4	.6, 1, 2, 4, 8, 11.6 usec	19/4.1/6.25/10.5	2 yr/63b	EFIS compatibie, 4 weather colors, opt moving map display & checklist
Bendix RDS-84 **$29,286**	28/4/1.2	5, 10, 20, 40, 80, 160, 320	12'' or 18''/flat plate	120°/13	Color/3'' × 4''	0.6 usec to 15 usec	22/4.5/6.3/10.5	2 yr/C63b	EFIS compatible, 4 color, opt moving map disp & checklist; Built-in self-test & diagnostics;
Bendix RDS-86 **$42,789**	28/4/1.2	5, 10, 20, 40, 80, 160, 320	12'', 18''/flat plate	120/13	Color/3'' × 4''	0.6 usec to 15 usec	22/4.5/6.3/10.5	2 yr/C63b	EFIS compatible, 4 weather colors, opt moving map disp & checklist; standard automatic tilt - autotilt'', Built-in self-test & diagnostics; 1000 NM NAV Map display
Collins WXR-220 **$16,780**	28/3.3/5	10, 25, 50, 100, 200	12''/flat plate	90/18	Color/5''	5.5 & 1.0 msec (dual)	22.5/4.0/6.25/10	1 yr/C63b	Ind incl built-in diagnostic & alignment aids; interfaces w/DCP-270 Information Ctr; range-adj contour; opt 10'' & 18'' flat plate antenna
Collins WXR-270 **$30,460**	28/3.75/5	10, 25, 50, 100, 250	12''/flat plate	120/14	Color/5''	5.5 & 1.0 msec (dual)	23.3/4/6.25/10.5	1 yr/C63b	Ind incl built-in diagnostic & alignment aids; interfaces w/DCP-270 Information Ctr, range-adj contour; opt 10'' & 18'' ant
Collins WXR-300 **$40,900**	28/3.75/5	10, 25, 50, 100, 200, 300	12''/flat plate	120/14	Color/5''	5.5 & 1.0 msec (dual)	27.1/4.7/6.25/12.5	1 yr/C63b	Black-matrix CRT; interfaces w/RNS-325A Radar Nav Sys & DCP-270 Information Ctr; range adj contour; opt 10'' & 18'' ant

Weather detection *Weather radar (continued)*

Manufacturer/Model Price	Input (VDC/amps) Output (kw)	Ranges	Antenna diameter/type	Scan width (°)/Scans per min	Display type/size	Pulse width	Weight/Panel size (H) (W) (D)	Warranty/TSO	Remarks
Collins **WXR-350** **$22,880**	28/3.75/ 5	10, 25, 50, 100, 200, 300	12"/ flat plate	120/ 14	dig. cont	5.5 & 1.0 msec (dual)	15.9/	1 yr/ C63b	Weather is displayed on EHSI or multi-function disp. of EFIS-85/EFIS-[illegible]
Sperry **Primus 300SL** **$38,932**	28/5/ 8	10, 25, 50 100, 200, 300	10, 12, 18"/ flat plate	120/ 12	Color/5"	1.0 msec/ 3.5 usec	(12")32.3/ 4.38/6.25/ 12.38	1 yr/ Yes	Data nav & stormscope interface avail.
Sperry **Primus 400SR** **$50,180**	28/5.6/ 10	2.5, 5, 10, 25, 50, 100, 200	10, 12, 18"/ flat plate	120/ 14, 28	Color/5"	1.0 msec/ 3.5 usec	(12")37/ 6.25/6.25/ 11.88	1 yr/ Yes	Data nav & stormscope interface avail.
Sperry **Primus 500** **$53,580**	28/5.6/ 10	2.5, 5, 10, 25, 50, 100, 200	12, 18"/ flat plate	120/ 14, 28	Color/5"	.6 & 2.3	39/ 6.25/6.25/ 12.5	1 yr Yes	Beacon navigation capability. Fast-time constant. Data nav & stormscope interface avail.

Other avionics *Antennas*

Manufacturer/Model Price	Frequency range (MHz)	Connector/Mounting hole pattern	VSWR	Weight/Size (H) (W) (L)	Polarization	Warranty/TSO	Remarks
Dorne & Margolin **DM N4-17/A** **$554**	108-118 329-335.3	BNC Female 4 mounting hole	Less than 5.0:1	1.5 lbs 5/–/12	Horizontal	5 yr C34b, C36c, C40a	VOR/LOC/G.S. balanced loop design ideal for helicopters to reduce rotor modulation. Provides maximum VOR or R-Nav, system performance. Low drag, and is lightweight.
Dorne & Margolin **DM N4-4** **$696**	108-122	BNC 6 mounting hole	Less than 5.0:1	2 lbs 8.5/–/17	Horizontal	3 yr C40a	Balanced loop VOR/LOC antenna provides greater rejection of rotor modulation. Lightweight magnesium rugged construction.
Dorne & Margolin **DM N48-1** **$260**	108-118	BNC 4 mounting hole	Less than 5.0:1	18 oz 6.2/16.5/	Horizontal	5 yr	VOR/LOC balanced loop tubular type antenna assures omnidirectional radiation pattern. Lightweight, ease of installation.
Dorne & Margolin **DM C57-1** **$254**	450-470	N Female 4 mounting holes	Less than 2.0:1 @454-459 MHz Less than 2.5:1 @450-470 MHz	8 oz. 3.5/1.75/4.8	Vertical	5 yr	Low profile metal blade radio telephone antenna. Low drag, high side load strength. Construction: metal, completely sealed to prevent damage from moisture, Skydrol or other contaminants.
Dorne & Margolin **DM C70-1/A** **$105**	118-136	BNC Female/ 4 mounting hole	2.0:1	12 oz 15/2.58/4.26	Vertical	5 yr C37b, C38b	VHF Communication antenna. Lightweight profile, unique design offer mechanical strength and high electrical efficiency. High vibration tolerance.
Dorne & Margolin **DM C70-4** **$140**	118-136	BNC Female 4 mounting hole	2.5:1	12 oz 8.8/2.58/4.26	Vertical	5 yr C37b, C38b	VHF Communication antenna designed specifically for bottom installations. Provides high degree of efficiency to assure maximum performance. High vibration tolerance.
Dorne & Margolin **CM C60-1** **$280**	118-136	BNC Female 6 mounting hole	2.0:1	1.6 lbs. 11/3.4/8.5	Vertical	5 yr C37b, C38b	Radiating elements encapsulated in high density unicellular foam and encased in high strength fiberglass housing. Aerodynamic design assures low drag.
Dorne & Margolin **DM N15-1** **$398**	30-76	BNC Female 4 mounting hole	Less than 1.85:1	2.13 lbs. 6.62/–/26.7	Vertical	3 yr Mil Spec.	Homing loop antenna of all metal, erosion resisting construction. Provided with terminals at each end for compatability with AN/ARC-54 Lobe Switching Homing System.
Dorne & Margolin **DM NI 70-2** **$85**	950-1220	BNC Female 4 mounting hole	1.7:1 @950-1220 1.5:1 @1000-1100	0.25 lbs. 2.2/1.75/5	Vertical	5 yr C66a, C74b	[illegible]E/Transponder L-Band metal blade antenna sealed and [illegible]roofed for increased reliability. Provides omnidirectional, vertically polarized coverage when installed on top or bottom.
Dorne & Margolin **DM NI 70-1** **$90**	950-1220	C Female 4 mounting hole	1.7:1 @950-1220 1.5:1 @1000-1100	0.25 lbs. 2.2/1.75/5	Vertical	5 yr C66a, C74b	DME/Transponder L-Band metal blade antenna sealed and waterproofed for increased reliability. Provides omnidirectional, vertically polarized coverage when installed on top or bottom.

Other avionics *Antennas (continued)*

Manufacturer/Model Price	Frequency range (MHz)	Connector/Mounting hole pattern	VSWR	Weight/Size (H) (W) (L)	Polarization	Warranty/TSO	Remarks
Sensor Systems S67-2002 **On request**	4200-4400	TNC Female 4 mounting holes	2.0:1 @4200-4400 1.9:1 @4210-4390 1.5:1 @4240-4360	3 oz. 17/3.65/3.50	Linear	2 yr TSO C87	Compatible with Collins, Bendix, Sperry, Gould, Honeywell altimeter systems
Sensor Systems S65-8282-21 **On request**	AM 190-1750 FM 88-103 TV 2-13 & 9-79 UHF	BNC 6 mounting holes	N/A	2.5	Horizontal	2 yr TSO C37b C38b	In flight TV antenna. Bolt pattern compatible with Collins 37R-2 antenna.
Sensor Systems S65-8282 **On request**	116-156	BNC 6 mounting holes	2.0:1	2.5/11.85	Vertical	2 yr TSO C37b &C38b	VHF antenna. Used on Cessna Citation.
Sensor Systems S65-1016 **On request**	225-400	N 4 mounting holes	2.0:1	16 oz. 7.75	Vertical	2 yr C37b & C38b	UHF antenna
Sensor Systems S65-1016-1 **On request**	450-465	N 4 mounting holes	2.0:1	16 oz. 7.75	Vertical	2 yr TSO C37b & C38b	AT-460 radio telephone
Sensor Systems S65-8282-34 **On request**	108-174 30-88 225-400	TNC 6 mounting holes	VHF/AM/2.3:1 VHF/FM/2.6:1 UHF 2.3:1	2.5/11.85	Vertical	2 yr TSO C37b &C38b	VHF/AM/FM/UHF antenna. ARC 182 radio.
Sensor Systems S65-5366-7[illegible] **On request**	960-1220	C 4 mounting holes	1.4:1 @1000-1100 1.7:1 @960-1220	4 oz. 2.2	Vertical	N/A	L-Band Antenna. Used on Boeing 707, 727, 737, 747, CL-600
Sensor Systems S35-1000-1 **On request**	75	C 6 mounting holes	1.5:1 @75 MHz 5.0:1 @75 MHz ±0.15	8 oz. 1.4	Linear (major axis)	2 yr TSO C35c	Marker Beacon Antenna. Used on Boeing 737, Lockheed L-1011 and Canadair CL-600 aircraft.

Other avionics *Emergency locator transmitters*

Manufacturer/Model Price	Output (mw after 48 hrs. operation @ -20°C)	Features included	Battery type Replacement interval	Operating range (°F)	Remote panel switch	Type installation	Weight/Panel size (H) (W) (D)	Warranty/TSO	Remarks
Dayton Granger Eagle EB-2BCD **N/A**	75	Voice/no voice capability, test light, 8" antenna	Alkaline/ 2 yrs	– 4 to 131	No	Fixed/ portable	3/ 7.5/3.75/ 1.75	1 yr/ C91a	High speed and other antennas available
Dayton Granger Dolphin **N/A**	250	Teflon coated ant, test light, water activated	Alkaline 2 yrs	– 4 to 131	No	Portable survival type	3.5/ 16.375 H/ 3" dia	1 yr/ C91a	Storage case; mounting bracket; manual or water activated
Dayton Granger Marlin **N/A**	225	Teflon coated ant	Water activated/ 6 yrs min	– 4 to 131	No	Portable survival type	3.2/ 20.5 H/ 2.75" dia	1 yr/ C91a	Testjacks included
Dayton Granger CIR-11-7 **N/A**	125	Mounting bracket, water resistant, portable ant	Alkaline/ 2 yrs	– 4 to 131	Yes	Fixed/ portable	3.5/ 8.16/3/2.75	1 yr/ C91a	Alternate high speed antennas

Other avionics *Emergency locator transmitters (continued)*

Manufacturer/Model Price	Output (mw after 48 hrs. operation @ -20°C)	Features included	Battery type Replacement interval	Operating range (°F)	Remote panel switch	Type installation	Weight/Panel size (H) (W) (D)	Warranty/TSO	Remarks
Dorne & Margolin DM ELT 8 $320	75	SARSAT/ COSPAS compatible, easy install, opt ant	Alkaline/ 2 yrs	– 4 to 131	Optional	Automatic fixed	2.75/ 2.86/3.4/ 8.82	1 yr C91	Warranty extended for another year each time D&M battery pack is replaced by an approved D&M battery pack
Dorne & Margolin DM ELT 8.5 $754	75	Spherical cov, 3 impact sensors, SARSAT/ COSPAS compatible	Alkaline/ 2 yrs	– 4 to 131	Optional	Automatic fixed	3.25/ 2.88/3.4/ 11.45	1 yr C91 (xmtr)	Warranty extended for another year each time D&M battery pack is replaced by an approved D&M battery pack; ELT specifically designed for helicopters
Narco ELT-10 $350	100	Rolamite "G" switch	Alkaline/ 2 yrs	– 40 to 160	Optional	Fixed, portable	3.5/ 3.17/2 18/ 8.12	2 yrs;* C91	*Warranty is extended to expiration date of battery when replaced with a Narco battery

Other avionics *ELT locator/VHF homing receivers*

Manufacturer/Model Price	Input (VDC/amps)	Frequency range	Tuning	Features included	Display	Type installation	Weight/Panel size (H) (W) (D)	Warranty/TSO	Remarks
Dorne & Margolin DM SE71 $898	14 or 28/ 7w	According to aircraft xcvr	As aircraft radio is tuned	Auto xfer from homing to comm, lightweight	"Fly The Needle" needle deflection and tone to pilots headset. Accuracy within 5°	Ind in inst panel, switch in avionics rack, ext ant (2)	2.5 (+ ant)/ 3.25/5.1/3.25	1 yr N/A	Attaches to existing VHF radio xcvr for airborne ELT homing missions. Exceeds RTCA DO-138 env specs
Dorne & Margolin DM ER3 $980	14 or self-cont'd	121.5/ 121.6/ 243.0 MHz	Rotary switch	Integ circuit and R.F. technology, text chan for training, rubber duck ant	Lighted indicator, speaker output	N/A	5 lbs.	1 yr N/A	Airborne or hndhld port rcvr/locator; back compartment for ant, batteries

Other avionics *Encoding altimeters and blind encoders*

Manufacturer/Model Price	Input (VDC/amps)	Alt. range	Type of display	Encoder design	Weight	Panel size (H) (W) (D)	Warranty	TSO	Remarks
King KE 127 $860	14/28/ .12 (14V) .15 ([illegible]V)	– 1000 to 20,000 ft	None	Optical	1.0/	Remote	1 yr p&l	Yes	Incl install kit. Works directly w/transponder to provide encoding capability. Remote blind encoder.
King KEA 129 $1,960	14/28/ .12 (14V) .15 (28V)	– 1000 to 20,000 ft	3-pointer	Optical	1.8/	3.25/3.25/ 4.6	1 yr p&l	Yes	Barometer set shows millibars & inches. Price incl install kit. Includes lights
King KEA 130 $2,155	14/28/ .12 (14V) .15 (28V)	– 1000 to 35,000 ft	3-pointer	Optical	1.8/	3.25/3.25/4.6	1 yr p&l	Yes	Barometer set shows millibars & inches. Price incl install kit. Includes lights
King KEA 346 $6,630	28V/.35	– 1000 to 50,000 ft	Counter drum-pointer	Optical	2.9	3.25/3.25/ 9	1 yr	Yes	Dual barometer set in in. Hg & millibars; int lighting; provided servoed output for alt preselect & alert
Kollsman B4515210003 $5,500	115VAC, 400Hz or 24VDC	50,000 ft	Counter-drum-pointer	Optical	2.5	3.13 dia./4.75	1 yr	C-10b	N/A
Kollsman B4545110001' $1,895	14 or 28	20,000 ft 35,000 opt	Triple pointer	Optical	2.5	3.13 dia./5.3	2 yr	C-10b	N/A
Narco AR-850 $550	11-32/ .35A	– 1000 to 30,700 ft	None, blind encoder	.7/		4.45/3.35/ 6.15	1 yr;	C88(a)	Digitizer only; remote mounted works w/most popular transponders

Other avionics *Radar altimeters*

Manufacturer/Model Price	Input (VDC/amps) Output (mw)	Features included	Type of display	Alt. range/DH warning	Accuracy (ft/%)	Weight/Panel size (H) (W) (D)	Warranty/TSO	Remarks
Collins **ALT-50A** **$9,880**	28/.85/150	Adjustable DH	Digital	0 to + 2000/ Light	± 2 or 2%	6.7/.83/3.38/6.0	1 yr/ C87	Incl DRI-55 indicator & 2 ANT-52 ant
Collins **ALT-55B** **$11,675**	28/1.1/330	Adjustable DH	Digital	0 to + 2500/ Light	± 2 or 2%	6.7/.83/3.38/6.0	1 yr/ C87	Incl DRI-55 indicator & 2 ANT-52 ant
Collins **FPA-80** **$8,254**	28/.5/N/A	Approved under Part 135.153(b) as an alternative to GPWS	Digital; voice storage	0-2000/ Aural	Works w/radar altimeter	2.9/3.3/2.25/12.5	1 yr/ C87	Aural call outs for radio alt, decision ht, GS & LOC dev, trim failure, att dev, preselected baro alt dev, & gear not down
King **KRA 10A** **$3,730**	28/.02/15	Single ant, DH adjustable	Pointer & dial exp 20' to 2,500'	20 to 2,500'/ Light & aural Movable B45	100-500'. ± 5% 500-2,000' ± 7%	3.8/3.1/3.5/8	1 yr/ No	14V requires KA 133 conv-$145. Cert prior to explosion testing
King **KRA 405** **$9,155**	28/.85/150	2,000 ft disp (internal 2,500 ft capability for use w/grd proximity systems)	Pointer & dial with lite	– 20 to 2,000 ft/ Movable bug	0-500 ft = 5 ft or 5% (whichever is greater) 500-2,000 ft ± 7%	10.75/3.26/3.26/6.61	1 yr p&l/ Yes	Opt expanded scale (– 10 to 200 ft) KNI 416 ind for helicopters; rem R/T. Incl ind, R/T, 2 ant & install kit
Sperry **AA-300** **On request**	28/1.5/70	Expanded scale	3'' pointer	0'-2500'/ Lite	0-100, ± 5, 100-500, ± 5%, 500-2500, ± 7%	6.75/3.3'' dia./4	1 yr/ Yes	Rising runway output; solid state R/T

Other avionics *Transponders*

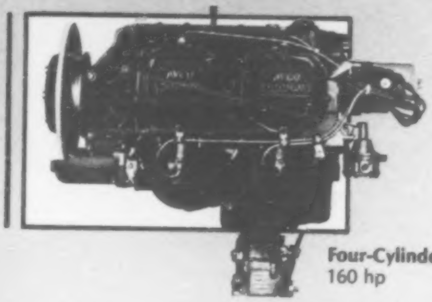
Manufacturer/Model Price	Input (VDC/amps) Output (watts)	Features included	Modes/Class	Weight/Panel size (H) (W) (D)	Warranty	TSO	Remarks
Bendix **TRS-42A** **$6,680**	18-33/.9/325	LSI encoder/ decoder. Auto VFR chan enc alt disp	A & C w/B capability/ 1	5.8/3.1/2.5/2.5	2 yr	C74c	One control will work two RT'S. ARINC 429 Dichroic display. Also tuned by FMS
Collins **TDR-90** **$6,370**	28/1.9/500	CTL-90 electronic ctrl head	A, C/ 1	4.9/3.13/2.5/6.5	1 yr/	C74b, C74c	Man reply-lite dimmer; includes CTL-90 electronic ctrl; opt CTL-92 w/CAD-62 adapter for serial digital tuning w/2 stored codes
Collins **TDR-950** **$1,315**	14, 28*/ 1.0 (14V)/ 250	Self test	A, C/ 1A	2.0/1.6/6.3/8.2	1 yr	C74c	Manual reply-lite dimmer; opt remote ident; *Adapter, $80
King **KT 76A** **$995**	14/28/1.8/250	4096 codes, encoder interface	A & C/ 1A	3.10/1.63/6.25/10.0	1 yr p&l	C74b	Panel mounted, 28V conversion kit $30. Remote ident capable
King **KT 79** **$2,640**	11-33/ 14V-1.78 28V-1.04/ 250	Dig Disp of enc alt & ATC code, pshbtn VFR code, sel	A & C/ 1A	3.4/1.3/6.25/10.5	1 yr p&l	C74b	Panel mounted. Remote ident capable
King **KXP 756** **$5,880**	28/1.3/250	Dig disp of enc alt in FL, test mode, pshbtn VFR code sel	A, B & C/ 1A	4.70/2.35/2.193/4.0	1 yr p&l	Yes	Remote mounted, 4096 codes, alt reporting. Remote ident capable
King **KXP 7500** **$10,148.**	115VAC/ 0.35/ 350	ARINC 572, solid state trans	A B & C/ 1A	9.0/ Std ARINC 3/8 ART Sht	1 yr p&l	Yes	Mounting Tray and connector $652.00. Does not include Code Selector. ARINC 532 adapt avail.
Narco **AT-150** **$950**	14/28*/ 1.6/ 250 nom	Remote ident, self test	A, C/ 1A	3.0/1.75/6.25/11.25	1 yr, 2nd yr opt	C74c	Manual reply-lite dimmer. *28V requires converter

Ready when you are. . .

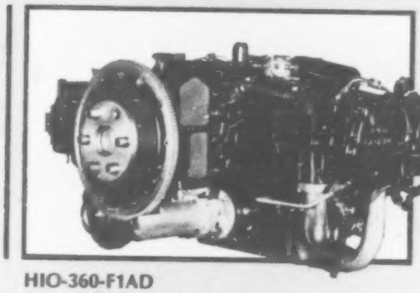
...with the latest powerplant technology. We're at work on your ideas right now: better fuel economy. Reduced pilot workload. High altitude performance. Economical powerplants for training. And alternate fuel capabilities.

Whether you build, buy, or fly helicopters, Avco Lycoming is developing engines to meet your needs. If you'd like more details, call or write.

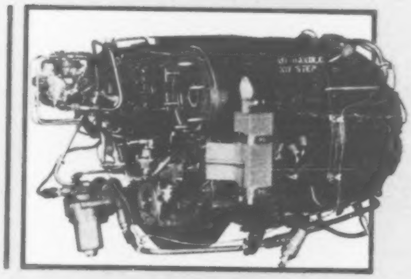
Avco Lycoming
652 Oliver Street
Williamsport, PA 17701
Telephone: 717/323-6181
Telex: 841415
Cable Code: AVIATCOR



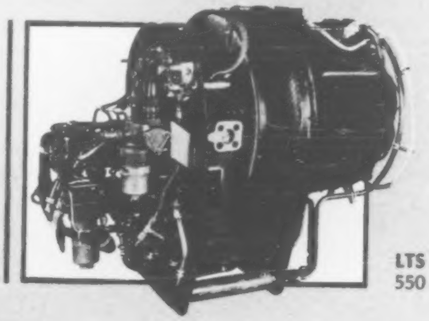
O-320B
Four-Cylinder Engine
160 hp



HIO-360-F1AD
Four-Cylinder Engine
225 hp (with turbocharger kit installed)

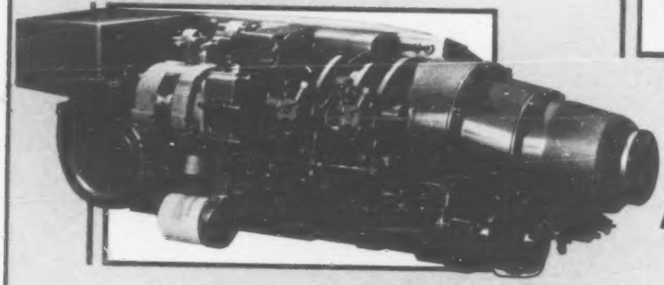


LTS 101-750C-1 Turboshaft
684 shp for takeoff



LTS 101-650B-1 Turboshaft
550 shp for takeoff

Stratified Charge Rotary Engine
Conceptual mock-up
Potential 50-1500 hp



Avco Lycoming TEXTRON

Avco Lycoming/Subsidiary of Textron Inc.

Engines...low operating costs and high reliability as primary goals

by John N. (Tony) Clark

The dedicated engine suppliers to the helicopter industry have always been conscious of their engine power, weight, operating costs and specific fuel consumption. In this highly competitive business, the airframe manufacturers compared these factors when selecting the powerplant for your particular helicopter. Therefore, there has always been pressure on us to improve.

The Economics Task Force of HAI has performed an excellent service to the industry by highlighting the key significance of engine operating cost in the Direct Operating Cost (DOC) of the helicopter and its contribution to the operator's bottom line.

Today's technology in engines for the commercial helicopter market provides total installed power that represents 17 to 31 percent of the Direct Operating Cost of the helicopter. This covers the parts, labor and line maintenance. These numbers vary depending on the maturity of the engine and the size and sophistication of the helicopter. When one adds the fuel cost, the total becomes 50 to 63 percent. The industry challenge for current product improvements and future engines is, therefore, evident.

Positive action by the Manufacturers' Committee of HAI was initiated by a letter from Charles W. Johnson, Chairman of HAI, to the presidents of all the industry manufacturers late in 1984. This letter appealed for advances in the reduction of operating costs of helicopters.

In response to this letter and after consultation with operators, the HAI Technical Committee, the HAI Economic Task Force, and the HAI Manufacturers' Committee reached an agreement on the first priority of cost reduction actions to be pursued. The consensus is that Automatic Airframe and Engine Trend Monitoring Systems have the highest near-term potential for operating cost reduction and increased reliability of any new technology available today. It has become increasingly reliable, affordable, and user-friendly.

An Automatic Trend Monitoring (ATM) Conference sponsored by HAI and attended by the airframe and engine manufacturers was held in November, 1985 to determine capability and availability of ATM equipment and to establish some preliminary standards acceptable to the industry.

This is just the beginning. Design Engineers, under the pressure of cost-conscious operators, will increase the priority of operating cost in their new engine design concepts. New technologies to reduce operating cost and increase reliability will be developed and introduced as they become available. Although turbine technology is maturing, further gains in reducing engine fuel consumption will become available both on current and new products.

Unscheduled helicopter down-time linked to airframe or engine reliability continues to be the greatest irritant and unpredictable element of Direct Operating Cost for the operator. By recording operating limit exceedances and by providing regular readings of airframe and engine operating parameters, system health may be analyzed on a daily, weekly, or continuous basis. This process is known as Trend Monitoring. With today's accuracy, even recorded manually, Trend Monitoring will permit planned preventive action at times more convenient to the operator's schedule. Also Automatic Trend Monitoring will eliminate this recording from the pilot's workload and substantially improve the accuracy of the data.

As usual, time and resources are the two key obstacles to early availability of improvements, but help for the operator *is* on the way.

At Pratt & Whitney Canada we are proud of the leadership position of our PT6T-3B engine in the helicopter industry. With some operators achieving a 6,500 hour time between overhauls and with an in-flight shutdown rate of one in 500,000 hours for the power sections, we believe we have set good targets with low operating costs and high reliability as primary goals.

John N. Clark was born in Victoria, British Columbia, August 2, 1931.

He received a diploma from the Royal Military College in 1953, and obtained a B.Sc. in Mechanical Engineering from Queens University, Kingston, Ontario in 1954.

He joined Pratt & Whitney Canada in 1954 and has been involved in a number of marketing functions. He was named Sales Director in 1977 and Director Marketing Programs in 1979. He was appointed Vice President Marketing Administration and Support in 1981.

He is currently a member of The Helicopter Association International, The American Helicopter Society, the Regional Airline Association. He is also a member of l'Ordre des ingenieurs du Quebec.

He is active in community and school activities and enjoys gardening and music.

Engine manufacturers' specification guide

Single engine piston

Manufacturer/Model	Turbocharged	Max T/O (hp)	Max trans. rating (hp)	Fuel cons. @ 75% rated power (gph)	Service ceiling (ft)	Weight (lb)	Dimensions, length/width/height (in.)	Remarks
Avco Lycoming Textron Model HIO-360-F1AD								
Enstrom F-28F	Yes	225	225	12	12,000	293	31.36/34.25/19.97	Weight is less optional starter and accessory equipment.
Enstrom 280F Shark	Yes	225	225	12	12,000	293	31.36/34.25/19.97	Weight is less optional starter and accessory equipment.
Enstrom 280FX	Yes	225	225	12	12,000	293	31.36/34.25/19.97	Weight is less optional starter and accessory equipment.
Avco Lycoming Textron Model HIO-360-D1A								
Schweizer/Hughes 300C	No	225	190	12	10,100	321	35.62/35.25/19.48	Weight is less optional starter and accessory equipment.
Avco Lycoming Textron Model 0-320-B2C								
Robinson R22 Alpha	No	160	124	10	14,000	255	29.56/32.24/22.99	Weight is less optional starter and accessory equipment.

REACH CANADA'S
HELICOPTER INDUSTRY

HELICOPTERS MAGAZINE
CANADA'S ONLY HELICOPTER MAGAZINE
For market information Call Paul Skinner, Publisher
(403) 275-9457 or write for details to:
158, 1224 - 53 Avenue N.E., Calgary, Alberta T2E 7E2

Single engine turbine

Manufacturer/Model	Max T/O (shp)	Max trans. rating	Cont. trans. (shp)	Specific fuel cons. (lbs/shp hr)	Service ceiling (ft)	Weight (lb)	Dimensions, length/width/height (in)	Remarks
Allison **Model 250-C20B**								
Bell 47 Conversions	420	270	260	.709	16,000	158	38.8/19.0/23.2	
Hiller RH-1100	420	274	233	.600	18,650	158	38.8/19.0/23.2	
McDonnell Douglas 500E	420	375	350	.650	15,000	158	38.8/19.0/23.2	
Soloy Conversion UH12ET	420	305	305	.709	12,000	158	38.8/19.0/23.2	
Allison **Model 250-C20J**								
Bell 206 JetRanger III	420	317	270	.650	13,500	158	38.8/19.0/23.2	
Allison **Model 250-C28B**								
Bell LongRanger I	500	N/A	N/A	.602	N/A	233	41.8/21.9/25.1	
Allison **Model 250-C30**								
McDonnell Douglas 530F	650	425	350	.588	18,000	245	40.9/21.9/25.1	
Allison **Model 250-C30P**								
Bell LongRanger III	650	435	370	.592	20,000	245	40.9/21.9/25.1	
Avco Lycoming Textron **Model LTS 101-600A-3**								
Aerospatiale AStar	615	483	590	.580	13,450	253	30.93/22.38/18.54	Engine offers design simplicity, easy maintenance and cost effective performance.
Turbomeca **Arriel IB**								
Aerospatiale Ecureuil	641	483	483	.581	15,600	N/A	N/A	
Turbomeca **Model Artouste IIIB**								
Aerospatiale Lama	590	592	592	.659	17,720	N/A	N/A	

Multi-engine turbine

Manufacturer/Model	Max T/O (shp)	Max trans. rating	Cont. trans. (shp)	Specific fuel cons. (lbs/shp hr)	Service ceiling (ft)	Weight (lb)	Dimensions, length/width/height (in)	Remarks
Allison **Model 250-C20B**								
Agusta 109A	840	740	740 520	.650	15,000	158	38.8/19.0/23.2	
MBB BO 105	840	690	690 380	.650	17,000	158	38.8/19.0/23.2	
Allison **Model 250-C20F**								
Aerospatiale AS355	840	678	678 440	.650	12,000	158	38.8/19.0/23.2	
Allison **Model 250-C28C**								
MBB BO 105LS	1,100	790	790 493	.608	20,000	233	41.8/21.8/25.1	
Allison **Model 250-C30S**								
Sikorsky S76	1,300	1,300	1,300 700	.592	15,000	249	40.9/21.8/25.1	

Multi-engine turbine *(continued)*

Manufacturer/Model	Max T/O (shp)	Max trans. rating	Cont. trans. (shp)	Specific fuel cons. (lbs/shp hr)	Service ceiling (ft)	Weight (lb)	Dimensions, length/width/height (in)	Remarks
Avco Lycoming Textron **Model LTS 101-650B-1**								
MBB BK117	1,100	848	848 493	.57	10,000	266	25.36/18.52/31.05	Engine offers design simplicity, easy maintenance and cost effective performance; has a 2½ minute OEI rating of 592 shp.
Avco Lycoming Textron **Model LTS 101-650C-3**								
Bell 222	1,368	925	875 335	.57	15,800	240	19.45/22.60/31.21	Engine offers design simplicity, easy maintenance and cost effective performance; has a 2½ minute OEI rating of 675 shp.
Avco Lycoming Textron **Model LTS 101-750B-2**								
Aerospatiale/Coast Guard SRR	1,380	N/A	N/A	.57	N/A	271	25.36/18.52/31.05	Engine offers design simplicity, easy maintenance and cost effective performance; has a 2½ minute OEI rating of 742 shp.
Avco Lycoming Textron **Model LTS 101-750C-1**								
Bell 222 Utility Twin	1,368	925	875 735	.58	15,800	244	20.15/22.60/31.31	Engine offers design simplicity, easy maintenance and cost effective performance; has a 2½ minute OEI rating of 735 shp.
Avco Lycoming Textron **Model AL5512**								
Boeing Vertol ER, LR, Multi-purpose	8,150	6,750	6,480 4,600	.574	8,500	750	24.25 Dia./47.1 L	
Boeing Vertol UT	8,150	6,750	6,480 4,600	.574	13,400	750	24.25 Dia./47.1 L	
General Electric **Model CT7-2A**								
Bell 214ST	3,250	2,350	1,950 1,725	.474	10,000	432	25 Dia./46 L	
General Electric **Model CT7-6**								
EH Industries EH101	2,000	5,000	N/A	.449	N/A	460	25 Dia./46 L	
General Electric **Model CT58-140**								
Agusta AS-61N1	N/A	N/A	N/A	N/A	N/A	340	16 Dia./59 L	
Pratt & Whitney **Model PT6B-36**								
Sikorsky S-76	1,920	1,500	1,500 960	.593	15,000	N/A		
Pratt & Whitney **Model PT6B-36**								
Bell 212	1,800	1,290	1,135 970	.595	13,200	N/A		
Bell 412	1,800	1,400	1,135 970	.595	16,300	N/A		
Rolls-Royce **Model Gem 60-3**								
Westland 30	2,360	2,100	2,100 1,239	.500	12,500	N/A	N/A	
Turbomeca **Model Arriel IC**								
Aerospatiale Dauphin 2	1320	1206	1,153 700	.581	15,000	N/A	N/A	
Turbomeca **Model Makila IA**								
Aerospatiale Super Puma	3,510	2,760	2,440 2,080	.476	13,780	N/A	N/A	

Be a leading exponent of the helicopter industry

...by becoming a member of HAI.

Even a modest increase in membership means an exponential increase in our ground effect.

The HAI enjoys a worldwide reputation as the focal point and principal forum of the civil helicopter industry.

And the direct benefits HAI offers its members provide an immediate return on the investment. Services and benefits run the gamut—from The Helicopter Annual to management and safety seminars designed specially for helicopter operators.

There are three membership categories. Helicopter operators, associate members (suppliers to the industry) and sustaining members (individuals who wish to support the growth of the helicopter industry).

Joining will give you an excellent benefit package now, and will increase the magnitude of HAI's efforts on behalf of the entire industry.

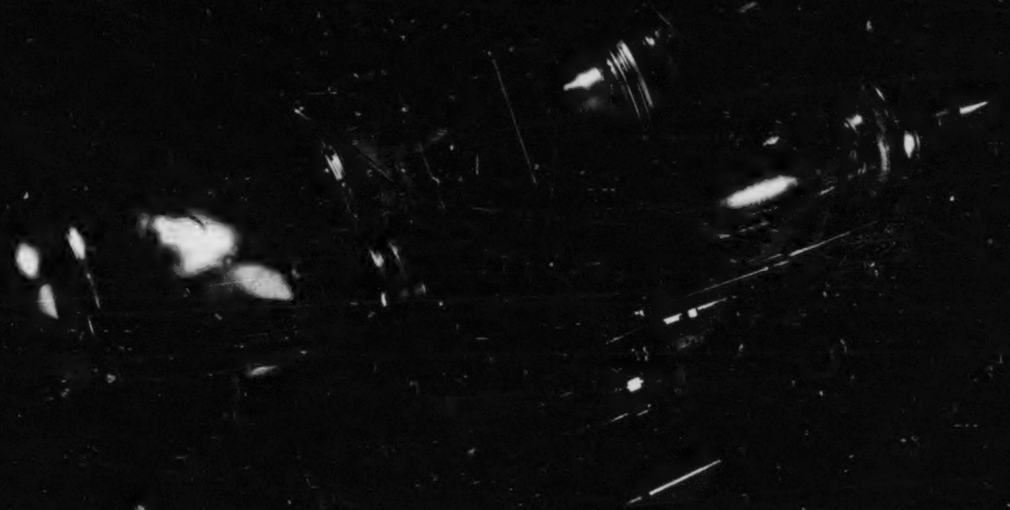
For a free information package on HAI membership, return the postpaid card on page 80, or call the Helicopter Association International.
1619 Duke Street, Alexandria, VA 22314-3406. Telephone: 703-683-4646. Telex: 89-615.

Helicopter
Association
International

World Class Service

National Airmotive offers the finest Allison service available in the industry today. Our company has been providing commercial aircraft operators with the highest quality maintenance support services for over 25 years and our stability has made us the largest Allison distributor in the world. Our main facility is conveniently located at the Oakland International Airport to provide you with full maintenance services for the Allison Model 250 engines. We also offer heavy maintenance, repairs, exchanges, spare parts and A.O.G. service from our satellite facilities. Our three satellite locations are: Anchorage, Alaska, Salt Lake City, Utah, and Van Nuys, California. Give us a call and see the big difference an exclusive Allison distributor makes on your repairs.

FOR THE ALLISON ENGINES we offer full overhaul, maintenance and repairs along with field service, training, warranty administration and 24 hour, 7 day a week A.O.G. service. We are the only authorized Allison distributor for the entire Allison Engine line...the 250, 501/T56, 501K and 570K.



NAC National Airmotive Corporation

Oakland International Airport, Oakland, CA 94603-0069
415/635-1500 or toll free 800 NAC-CORP
Telex 335-346

Allison

FAA Repair Station [illegible]

An eternal triangle...

by Vincent V. Colicci

The message proclaimed by the Helicopter Association International at the 38th Annual Meeting and Industry Exposition is "Helicopters...Essential and Economical."

Supporters of this industry recognize the achievement of the helicopter and its contribution to mankind. They are convinced that it is essential, but the economical portion of the message must be improved upon. Helicopters will not go the way of the dirigible, but the industry has a challenge to make them more affordable.

Until recently, the industry failed to see the necessity of making the helicopter an economical tool because of the relationships among the manufacturer, the operator and the repair and overhaul facility. As a result, operators are faced with ever-increasing costs in a competitive marketplace.

We are constantly faced with this eternal triangle of the manufacturer, the operator and the maintenance facility. The machine must attain certain characteristics to satisfy each of these participants. There must be a safe, cost-effective vehicle, offering a sound business proposition, to please all three. Achieving these objectives requires a fine balancing act.

Under the status quo, these relationships often create problems rather than solving them. The role of the manufacturer is rather nebulous and confusing. Once a sale is completed, the cord is severed and the manufacturer's commitment is buried in the vague language of warranty. The operator must rely upon the service station to rectify problems. The maintenance facility must repair the helicopter for the operator, while satisfying the demands of the manufacturer in warranty-related repairs.

Yet the role of the service station in making the helicopter economical is limited. The service station is unable to improve on either the design or manufacture of the helicopter, and, therefore, has a limited impact on the responsibility for operating costs. Additionally, assignment of warranty cost is never clearly defined. Each of the participants now proceeds in his own best interest. This is an accountant's nightmare when he tries to project the cost factors for his company's helicopter operation. The manufacturer will not do this for him. How does the operator unscramble this egg?

There is much that needs attention. A major portion of the economic surprises are incubated within the design and manufacture of the helicopter. These can result in occasions of unscheduled maintenance. When will they occur and at what cost? Dependability and predictability should be solved at the factory.

The problems with warranty must be solved by the participants in the triangle. One hundred percent warranty implies three different interpretations. To the operator, it means zero costs, i.e., no phone, shipping, labor, taxes or parts. To the manufacturer, it means materials only, and that cost should be prorated. The service station has the goal to profit at much the same rate he would for servicing a warranty item as he would for a similar job which was out of warranty. There must be an equality of charges for parts and labor. Therein lies the problem: the service department is forever on a collision course with both the manufacturer and the operator.

How can these problems be solved? One suggestion would be a tripartite arrangement in which the service stations participate in the sales agreements. Initially, service agreements were given to an operator who purchased a helicopter. The operator was then eligible for a parts discount when he worked on his own equipment. At that time, there were few privately-owned helicopters, and customer service was not a factor. This changed as the industry grew.

Most new entries in helicopter operations have unrealistic expectations regarding costs. We as an industry have truly failed in this area. The brutal fact is that we have been unable to provide realistic, predictable cost data. Manufacturers' published figures continue to miss the mark by a wide margin. In order to fix direct operating costs, some operators have chosen parts-support contracts and power-by-the-hour agreements. One has to analyze this type of arrangement very carefully. Who are the beneficiaries? The manufacturer gains an insurance policy and frequently the operator ends up paying for his own warranties.

The Guide for Presentation of Estimating Helicopter Operating Costs was published by the Aerospace Industries Association of America and HAI in 1981, and it is now being revised. This is an opportunity and a challenge to rectify these cost misconceptions and the release of more useful data concerning parts replacement costs. It is my hope this data will extend beyond warranty periods to assist the operator in forecasting costs. Standardizing operating cost data will help achieve proper appraisals and a simplified form would facilitate comparisons.

Where the civil helicopter industry goes from here is largely in the hands of the manufacturer. He is at the helm, and unless he becomes truly sensitive to high costs, we will continue to search for the elusive, economical machine.

Vincent V. Colicci is President of Helicopter Services, Inc., a repair and overhaul facility at State Airport in Warwick, Rhode Island. Colicci has been in the industry for more than 30 years, and was President of HAI in 1979. He is a member of the Board of Directors for Evergreen Helicopters, Inc., and a member of the American Helicopter Society.

CAPT.
GURNI
FRENCH WAR ACE

AP Wirephoto—Courtesy of the Free Library of Philadelphia

The Days Of A Cavalier Approach To Aviation Insurance Are Long Gone

Barnstormers captured the romantic imagination of their day with dazzling skills and bravado. Today's aviation professionals pride themselves on their proficiency. The risks involved are too great to be cavalierly disregarded.

Business aircraft operators are specialists. When they need aviation insurance they turn to the aviation insurance specialists...Bayly, Martin & Fay, Inc.

BMF offers companies and aviation trade organizations like HAI, NATA, RAA as well as private, corporate and commercial operators the most comprehensive risk management programs at the most competitive premium rates for individual exposures. BMF also handles specialized coverages required by flight schools; fixed base operators; ag aviation operators; airframe, engine, accessory, avionics and components manufacturers.

Aircraft Hull and Liability, Contractual Liability, Personal Injury Liability, Inflight Hangarkeeper's Liability, Workers' Compensation, Group Pension and Medical Benefits, Aircrew Loss of License and Foreign Risks...Bayly, Martin & Fay, Inc. brokers all lines of coverage to aviation professionals around the world in addition to all types of non-aviation insurance coverages.

For more information call any of our regional aviation offices and we'll show you how seriously we take your aviation insurance business.

BMF

Bayly, Martin & Fay, Inc.

International Aviation Insurance Brokers

Bayly, Martin & Fay, Inc. Aviation Offices: ANCHORAGE: 1031 West Fourth Avenue, Pouch 7-502, Anchorage, Alaska 99510, 907/276-5617; BALTIMORE: 2 Hamill Road, Suite 246, Village of Cross Keys, Baltimore, Maryland 21210, 301/435-0500; LOS ANGELES: 3200 Wilshire Boulevard, 15th Floor, Los Angeles, California 90010, 213/386-8120; PHILADELPHIA: 1700 Market Street, Philadelphia, Pennsylvania 19103, 215/561-5700; SEATTLE: 2001 6th Avenue, Suite 1050, Seattle, Washington 98121, 206/682-3980.

Insurance rates reflect claims paid

by Laurence J. Maloney

Attention to safety techniques is, in time, going to pay off

To most, if not all, commercial operators insurance is a necessary evil that absorbs huge quantities of cash (often third behind payroll and fuel). What makes it harder to bear is the fact that all you get is a thick pile of paper that is largely unintelligible to the buyer and, in many cases, impossible for the seller to explain succinctly.

Having reluctantly accepted that insurance is indeed necessary and evil (as a cash consumer), what can be done about it? Regrettably, aviation insurers currently are licking their wounds with the knowledge that 1985 is the worst accident year in aviation insurance history. Insurers are, therefore, unlikely to be receptive to pleas for leniency from hard-pressed helicopter operators, manufacturers, repairers or anybody you can name who has an aviation exposure. So, we are currently faced with a hardening insurance market and a struggling helicopter industry. The hard truth is that many operators can do little to affect their insurance costs directly. These "trapped" operators are in the majority as operator members in this Association — the one-to-ten ship fleet operator. When it comes to Hull and Liability coverages, he is going to pay the "going rates." To get the best of the "going rates" he should select an experienced and qualified broker/agent who has good access to and business relations with the aviation insurance markets. Such an agent should thoroughly know your business and, therefore, be able to present you, the operator, in the best light to make sure the cash expended secures the best coverages and most flexible program available.

Over the longer term, the operator can directly affect his insurance costs only by reducing or eliminating claims. While this is easier said than done, it is the only guaranteed way to reduce premiums — but everybody has to contribute. Attention, and devoted attention at that, to safety techniques is going to pay off. Time and money spent on maintenance, pilot selection, pilot and mechanic training and operational risk reduction will be returned by reduced rates. The operation of a commercial helicopter has inherent hazards and insurers react to the higher hazard operations with increased rates or a refusal to provide coverage. The operators have to show that these operations can be conducted without wrecking equipment or hurting people. Establishment of a clean track record over several years is essential and doing so with one insurer or market is desirable as this will help to eliminate wide fluctuations in rates.

The larger operators already establish their own rates by their own loss record over time. Their rate structure is largely in their own hands. Also they have the advantage of purchasing power and the flexibility to make use of self insurance techniques such as higher specific or aggregate deductibles for hull coverages to manipulate their rates. The smaller operators do not enjoy these opportunities.

Every operator complains that accidents he has are somebody else's fault and in many cases he is right or at least partly right. Manufacturers, repairers and servicers of helicopter airframes, engines and components are also suffering premium shock. They are routinely experiencing price increases of double or more. The claims experience of product liability insurers is disastrous, and the litigation fear factor as an underwriting consideration is very high. In the U.S. today, product liability cases routinely produce claims that make the headlines. Quality control in design manufacturing and servicing has become of paramount importance. Advances in technology have given added arsenals to plaintiff's counsel — they can say, with some technical certainty and expert witnesses, that a component manufactured, serviced or repaired several years prior to the accident was the primary cause of the accident. Ten years ago or less, these accidents were unexplained or called "pilot error." Today, the manufacturer is as responsible as his insurers.

Manufacturers, repairers and servicers have been often hit with big claims where their involvement, let alone negligence, is tenuous at best. Only changes in the law can help here and this is not likely to happen in the immediate future. As a practical matter, quality control all the way down the line is the only way to limit claims and correspondingly reduce premiums.

The Helicopter Association International is trying to help members on a number of fronts, with special emphasis on safety programs. The HAI staff and the Safety Committee are working hard to disseminate information of practical value to members, and they are working with airframe and component manufacturers in an effort to improve product design and integrity. The operators' manual:, a significant and most useful document, is being reviewed and updated constantly. HAI's Safety Awards to pilots and operators are industry-wide certificates of excellence.

These efforts need member support to flourish.

To conclude, the insurers are businessmen — they have to make a profit to ensure their survival. They will, over the long run, charge rates that reflect claims paid plus the cost of being in business plus a modest return for shareholders — no different from any other businessman. By far the largest ingredient in the equation is claims — and it is up to HAI members and nonmembers to reduce this figure.

Laurence J. Maloney began his career in insurance at Lloyd's of London in 1964. After four years with that firm, he emigrated to Vancouver, British Columbia, and joined a large, regional broker, where he specialized in marine and aviation insurance.

In 1971, Mr. Maloney became an Associate of the Canadian Insurance Institute, and was awarded the Gilbert Ross Memorial prize for best results in Marine courses.

From 1971 to 1978, Mr. Maloney was an account executive for a large international helicopter operator. During that time, he traveled extensively to major insurance centers in North America, London and Paris. In 1978, he joined Frank B. Hall & Co., Seattle, Washington, as manager of the Aviation Department.

Over the past seven years, he has developed a clientele of helicopter operators and other commercial aviation firms throughout the northwest United State, Canada and overseas. He is a regular speaker at aviation seminars, and currently Insurance Representative to HAI's Board of Directors.

- **LEADER IN LOSS PROTECTION**
- **SAFETY CONSULTANTS**
- **WORLDWIDE SERVICE**

Alexander & Alexander Inc.
of New York
100 William Street
New York, NY 10038
Joesph M. Rosenthal
Sr. V.P.-Aviation
(212) 806-6301

Reed Stenhouse Ltd
2700 One Palliser Square
Calgary, Alberta T2G OP9
Canada
Robert A. Pincott
Sr. V.P.-International
(403) 267-7010

Reed Stenhouse Marketing Ltd.
2 South Place, P.O. Box 214
London EC 2P 2DX
United Kingdom
David P. Trezies
Deputy Chairman/
Chief Executive-Aviation
(01) 628-6011

Alexander Howden Ltd.
10 Devenshire Square
London EC 2M 4QR
United Kingdom
Michael H. Hughes
Chairman-Aviation
(01) 283-3456

Alexander
&Alexander

REED STENHOUSE

Aviation & Aerospace Division

Economic maturity is close at hand

by Robert Fox

"Never have so many done so much for so little"

To steal the basics from an historical quote may not be original; however, I feel it states the position of our industry very clearly. We are all aware of the state of the helicopter industry. Numerous companies have gone out of business either voluntarily or by the dictates of their financial backers. Even as I write, additional operators are facing the same fate.

This has happened for several reasons: soft oil and timber markets, cut-backs on construction, oversupply of helicopters in the marketplace and rising costs from manufacturers without noticeable product improvement.

There is, however, one central problem affecting the viability of our industry: basically, operators are not charging enough for their services. The reasons for this are unclear; either operators have the desire to control a marketplace, believing others will not be competitive, or they lack the financial knowledge that would allow them to price their service at a level to achieve profitability.

As skilled buyers, customers are taking advantage of the imbalance of equipment to available work. We are seeing price levels on application contracts that were the norm in 1978. Assuming average inflation, these prices should be around 40 percent higher. Recently, we have observed operators who have cut their own contract prices in the EMS market. This was done to meet or beat the competition. In one case, the operator left $250,000 on the table for each year of a three-year contract.

These are two examples of economic suicide, and additional examples can be stated for every marketplace the helicopter enters. Stringent requirements of flight departments for safety, proper operational facilities, and operational expertise have been placed in a back seat position by contract officers who simply look at the bottom line of the price proposal. Should we believe the flight department or should we ignore their requirements and work off the ramp to be competitive?

The manufacturers, faced with an oversupply of equipment in the hands of their normal end users, have not helped the situation. They too are faced with the same need to sell products and earn profits. To accomplish this, they have made credit too easily available in marginal situations, they have raised prices on spare parts (in some cases as much as 40 to 50 percent in one year), and they have gone around their normal customers to sell to the end user through tax shelters and financial leases. They have offered financial lease programs to operators who find themselves bound to lease payments without gaining an equity position on their equipment, and who find themselves bound to long-term obligations without long-term work opportunities to make the payments.

Perhaps we should not criticize the manufacturers too heavily, as they are an integral part of our industry faced with much of the same problems as we, the operators. However, one would believe they could have acted in a more responsible manner by controlling their sales practices and concentrating on a more reliable product. The former is reflected in the number of repossessed aircraft sitting on their ramps. The latter would be reflected in the operators' willingness to accept reasonably higher prices for a product that would run reliably, economically, and meet T.B.O.'s.

To solve the problems, we must consider ourselves the filling in the sandwich between rising costs and soft markets. We are not the only group affected. All service industries are facing the same situation.

Not all operators have the same costs. Larger companies have economies of size, but customarily have higher overheads. Smaller operators usually have the opposite situation. In either situation, operators need to know their real costs and what it will take to make a profit. If they are not in a position to establish an adequate cost accounting department internally, they should acquire outside consultation. Next, each operator should rely on expert tax and legal assistance to protect his interests. Each operator should write his own contracts and control his position. What cannot be obtained by price can be recovered by contract terms. In considering costs, the operator should use actual history and experience and not rely on manufacturers' projected cost or components running to T.B.O. He should always remember that overhaul reserves cannot be used for operating cash, a misconception which has been the downfall of many operators. A costing discipline should be established and adhered to.

The next major point to consider is price or tariff discipline. Once costing disciplines have been established, which should include some contingency for the unexpected, prices can be developed that will return a profit. At that point, economic maturity is close at hand.

Price discipline is difficult for many to maintain, but it is the only avenue to survival. Cash flow is necessary to existence, but negative cash flow is the fast track to non-existence.

To maintain proper disciplines, the selection of personnel is extremely important. Factual feedback from sales personnel or field personnel on market conditions is a necessity. It is much simpler to take orders, cut prices or accept rumors than it is to sell the customer; and it is necessary to know your customer or his buyer. Customers will shop suppliers to force market conditions that are beneficial to them. Unfortunately, the industries we serve are generally more mature and disciplined than we are.

Robert Fox has been with Evergreen Helicopters, Inc. for 14 years, with 25 years experience in the helicopter industry. Prior to his involvement with the aviation company, he was a supplier of agricultural chemicals.

During his tenure with the company, he developed the International Marketing Division for EHI while in the position of Vice President of International Marketing. He now serves as Senior Vice President Marketing and Sales for the company.

Fox also is heavily involved with Helicopter Association International committees, including Government Contracts and Agricultural. He presently is the chairman of the Economics Committee.

Fox majored in business at Portland State and Washington State Universities.

Customers use buying disciplines that have forced us to make poor decisions that adversely affect our ability to remain viable. However, we control the destiny of our industry. Only through proper costing and pricing disciplines can we continue to exist. A number of other factors support and help our ability to maintain discipline. They are personnel selection, warranty programs, safety programs, proper maintenance procedures and numerous others.

We cannot sit back and ask others to cut our costs of operation to fit the low levels of pricing being used today. Manufacturers have a responsibility to provide reliable and economical products, but they are not responsible for our own financial inability. Financial institutions have a responsibility to provide guidance, but not to control the misguided efforts of our industry if we do not accept their input. The economy is not responsible, because a drastic turnaround would only lead some back to the unbridled direction we were headed during the 1970s. Discipline of our own business practices is the only direction that will return the helicopter industry to a stable and viable state.

HAI has established an Economic Task Force to assist all operators. We also have the Economic Committee that exists only to support the Association members. Both groups are working diligently to develop reliable economic equipment, as well as informational guides to assist operators with operational information. We have this information available for the asking, but we need operator input to improve the information and operator support to continue the committee functions.

We, the operators are the only group responsible for the present state of our industry. Only through proper discipline will we reach economic maturity and establish a mature industry.

D. Hubin
ROLLINS BURDICK HUNTER

Thank Goodness For Rollins Burdick Hunter

Like you, transporting my cargo requires special care. And of course the same is true of the insurance package covering it. — That's why I do business with Rollins Burdick Hunter.

Even though my needs are out of the ordinary, the Rollins Burdick Hunter staff tailored a policy especially for me. With the service I can count on. The Price I can afford. And the coverage I need.

So don't wait, call the Toll-free number today. You'll see — there's no labor to getting peace of mind protection at Rollins Burdick Hunter.

ROLLINS BURDICK
HUNTER
P.O. BOX 9210.Wichita,KS 67277

1-800-835-2677
or (Kansas) 316 943-9331

Technical Committee enhances safety

by Doug Matthews

The HAI Technical Committee is made up of maintenance specialists in the helicopter industry whose main priorities are enhancing safety while reducing direct operating costs of the helicopter.

The Technical Committee is basically as it was when started in 1948 by the Helicopter Association of America; however, today it includes representatives from the Federal Aviation Administration, an accessory repair station, and an industry consultant.

The members of the committee have been in the helicopter industry for many years, and either are owners of repair facilities, maintenance directors for operators, assistant maintenance directors or high-ranking maintenance personnel from companies throughout the industry.

Three of the members of the Technical Committee have won the Helicopter Association International Maintenance Man-of-the-Year award.

One of the chief areas in which the committee works is warranty enforcement, in which owners, operators and manufacturers of helicopters are all involved. Through the effort of all committee members, warranty programs have improved greatly through the years. In the late 1940s, there weren't any warranties to speak of. In the 1950s, there was some improvement, but warranties were still infrequent.

In the 1960s aircraft manufacturers would sometimes say that if an accessory had a premature failure, you had to go to the accessory manufacturer—which presented quite a problem.

Consequently, operators ended up buying another part, and then fighting the battle of warranty later. This, many times, was hard to do because the parts were not always available.

The HAI Technical Committee worked hard on these problems and, through joint efforts, there was some improvement such as authorized accessory approved repair stations.

Some of these repair stations were allowed to give warranties by the accessory manufacturers. Also, in the 60's the Technical committee became involved with manual improvement. Some of the early manuals were not much more than scaled down drawings, or books or drawings with footnotes—some not even typed!

As an example, if someone bought a new helicopter and then a year later bought another new helicopter of the same make and model, the manuals he received with the second helicopter were different than the ones he received with the first one. The Technical Committee was very instrumental in getting manuals improved through many long hours of hard work.

During this era came the turbine power helicopter, and the Technical Committee was able to give some of the manufacturers limited input on maintainability because they were building the prototypes.

Quality control is very important to the Technical Committee. Defective parts that are sent to the operator create down-time, which is expensive, so again, the Technical Committee works with the operators by acting as a group and representing the Helicopter Association to the manufacturers to get problems resolved.

The 80s have seen a general flattening of the growth curve, but there are now new problems such as interpreting regulations set forth by the Federal Aviation Administration. One item that the Technical Committee addressed was preflight inspections versus preflight checks.

A preflight inspection is signed off by an airframe and powerplant mechanic. A preflight check can be signed off by a pilot. This one item is very economical without diminishing safety. Based on Technical Committee recommendations to the Federal Aviation Administration (FAA) to accept checks rather than inspections, this action has cut approximately $29 million annually (1982 dollars) of the cost of operating helicopters throughout the world.

The Technical Committee has also participated in the FAA's regulatory review program in the maintenance area. There are several regulations that the Technical Committee has helped advance.

One of these is 81-10 concerning major repair differentiation—something very important to the helicopter industry. Helicopter repairs must be done in the field by trained helicopter maintenance personnel. The Technical Committee has helped differentiate between major and minor repairs.

There also has been a shortage of maintenance personnel. This created a problem to some operators. They were unable to get airframe and powerplant (A & P) qualified mechanics.

The Technical Committee presented the HAI Board of Directors a scholarship program to take a top student from two A & P schools and send them, after graduation, to an airframe manufacturers' training course on their aircraft.

The aircraft manufacturers cooperated very well. They furnished the schools while the Helicopter Association International provided living expenses. There were four students given scholarships in a two-year period. These students are now in the industry.

Doug Matthews is Chief of Helicopter Maintenance with the Los Angeles County Fire Department's helicopter unit. He began his work with helicopters in 1955, receiving his Airframe & Powerplant (A & P) license in 1958 and his Aircraft Inspection (AI) license in 1970.

He has worked with all models of Bell Helicopters from the 47D through the 205A1 to 212, as well as the Hughes 269A and B, and the Doak Vertical Life D-16, which was produced in 1957.

He joined the County of Los Angeles' Fire Department as a helicopter mechanic in 1966, and has since been promoted to his present position. He has worked on several experimental programs with the Fire Department, including water tankers and medical evacuation equipment for helicopters and particle separators for Bell 204 and 205 series using the T53L13 and L11 engines.

He also was involved in the development and installation of the first commercial forward-looking infra-red equipment for helicopters and night vision goggles for the U.S. Forest Service.

He is the 1975 recipient of the FAA's Western Region Mechanic of the Year and the HAI's 1979 Maintenance Technician of the Year award. He has served on the HAI Technical Committee for ten years and is that committee's current chairman.

He holds a Rotary Wing Commercial Pilot's certificate.

Mr. Matthews raises and breeds quarter horses with his wife Barbara, and he is an active member of the National Cutting Horse Association.

The Seven-Year Decision.

President F. W. Becker
Airwork Corporation

"Make It The Right One."

The seven-year decision? Engines in normal corporate service require major maintenance every seven years. Airwork-developed innovations in overhaul technology make us the right choice for you.

We treat all your engine maintenance needs during those seven years. We provide realistic estimates. We build in reliability. And back it with unique workmanship warranties and aftersale support—anywhere in the world. Anytime, day or night. That's why major fleet operators make Airwork *their* seven-year decision.

When it's time for your next major maintenance, or if you'd like a consultation on an engine symptom, call us. You'll find that world-class aviation support is a lot closer than you think. It's what Airwork is all about.

The Power People

Airwork®

ATS

In the East, call 609/825-6000. In the Southern and Gulf States, call 305/592-3040. On the West Coast, call 818/842-5171. For APU service, call 516/242-4330, 800-356-1101. Nationwide, call 800-257-7077 Toll Free. For Toll Free Troubleshooting, call 800-523-7000 Monday thru Friday, 8 am – 5 pm. Or 609/825-6000, Telex: 83-1754 for 24-hour service.

Factory-authorized by all major manufacturers of turbine engines for business and commercial aviation.

Associate members product and service directory

Aircraft accessories manufacturers/distributors

Aeronautical Accessories Inc.
Bristol, TN U.S.

Bell Helicopter Asia (Pte) Ltd.
Singapore, Singapore

Brackett Aviation Co., Inc.
Kingman, AZ U.S.

Breeze-Eastern
Union, NJ U.S.

Bristol Aerospace Limited
Winnipeg, MB, Canada

Casey Copter Accessories, Ltd.
Dorval, PQ, Canada

DeVore Aviation Corporation
Albuquerque, NM U.S.

Facet Enterprises, Inc.
Greensboro, NC U.S.

Foxtronics, Inc.
Dallas, TX U.S.

Fujinon, Inc.
Scarsdale, NY U.S.

Heli Plex Inc.
Arlington, TX U.S.

Helicomb International, Inc.
Tulsa, OK U.S.

Hoover Industries, Inc.
Miami, FL U.S.

Lear Chemical Research
Mississauga, ON, Canada

Lucas Aerospace Ltd.
West Midlands, England

Lucas Aerospace
Tustin, CA U.S.

Lucas Industries Inc.
Irving, TX U.S.

Midland Ross Corporation
Urbana, OH U.S.

Norton Performance Plastics
Ravenna, OH U.S.

Pedley Nets
Glen Ellen, CA U.S.

SEI Industries Ltd.
Vancouver, BC, Canada

Schwen Technology
Pleasant Hill, CA U.S.

Simplex Manufacturing Company
Portland, OR U.S.

Standard Helicopter Corporation
Portland, OR U.S.

Synergetics, Inc.
Dallas, TX U.S.

Tech Tool Plastics, Inc.
Fort Worth, TX U.S.

Aircraft Accessories repair/overhaul

Aircraft Technical Machine, Inc.
Tucson, AZ U.S.

Breeze-Eastern
Union, NJ U.S.

Foxtronics, Inc.
Dallas, TX U.S.

Helicomb International, Inc.
Tulsa, OK U.S.

Norton Performance Plastics
Ravenna, OH U.S.

Airframe manufacturers

Aerospatiale Helicopter Corporation
Grand Prairie, TX U.S.

Aerospatiale Helicopter Division
La Courneuve, France

Agusta Aviation Corporation
Philadelphia, PA U.S.

Bell Helicopter Textron Inc.
Fort Worth, TX U.S.

Boeing of Canada Ltd.
Winnipeg, MB, Canada

Boeing Vertol Company
Philadelphia, PA U.S.

California Helicopter
Sun Valley, CA U.S.

Canadair Limited
Montreal, PQ, Canada

Cessna Aircraft Company
Wichita, KS U.S.

Costruzioni Aeronautiche
Giovanni Agusta S.p.A.
Rome, Italy

Helicopter Leasing & Service
Tampa, FL U.S.

Hiller Helicopters
Port Angeles, WA U.S.

Kawasaki Heavy Industries, Ltd
Minato-Ku, Tokyo, Japan

MBB - Helicopter & Transport Division
Munich, West Germany

MBB Helicopter Corporation
West Chester, PA U.S.

McDonnell Douglas Helicopter
Culver City, CA U.S.

Robinson Helicopter Company
Torrance, CA U.S.

Schweizer Aircraft Corporation
Elmira, NY U.S.

Sikorsky Aircraft
Stratford, CT U.S.

Westland Helicopters Limited
Somerset, England

Westland Inc.
Arlington, VA U.S.

Airframe repair & overhaul

Associated Air Center
Dallas, TX U.S.

Atlantic Aviation Corporation
Teterboro, NJ U.S.

Bristol Aerospace Limited
Winnipeg, MB, Canada

California Helicopter
Sun Valley, CA U.S.

Composite Technology, Inc.
Stockton, CA U.S.

Delta Rotorcraft Ltd.
Richmond, BC, Canada

Eastern Aircraft Structural Repair
Arnprior, ON, Canada

FFV Maintenance
Linkoping, Sweden

Frontier Pacific Aircraft
Long Beach, CA U.S.

Hawker Pacific Pty Ltd.
Condell, NSW, Australia

Heli Orient (PTE) Ltd.
Singapore, Singapore

Helicomb International, Inc.
Tulsa, OK U.S.

Helicopter Services, Inc.
Warwick, RI U.S.

Helicopter Support Australia
Kununurra, Australia

Helicopter Welders of Canada
Richmond, BC, Canada

Hynes Aviation Industries, Inc.
Frederick, OK U.S.

Indianapolis Heliport Corporation
Indianapolis, IN U.S.

Kinzie Industries, Inc.
Alva, OK U.S.

MBB - Helicopter & Transport Division
Munich, West Germany

Mata Jerusalem Helicopters
Jerusalem, Israel

McAllister Engineering
Kent, WA U.S.

Meridian Heliflight, Inc.
Prince George, BC, Canada

Ramapo Helicopters, Inc.
Spring Valley, NY U.S.

Ro-Wing Aviation, Inc.
Camarillo, CA U.S.

Rotor Blades, Inc.
Stockton, CA U.S.

Turbo West, Inc.
Broomfield, CO U.S.

Uscan Aviation Sales Ltd.
Alliston, ON, Canada

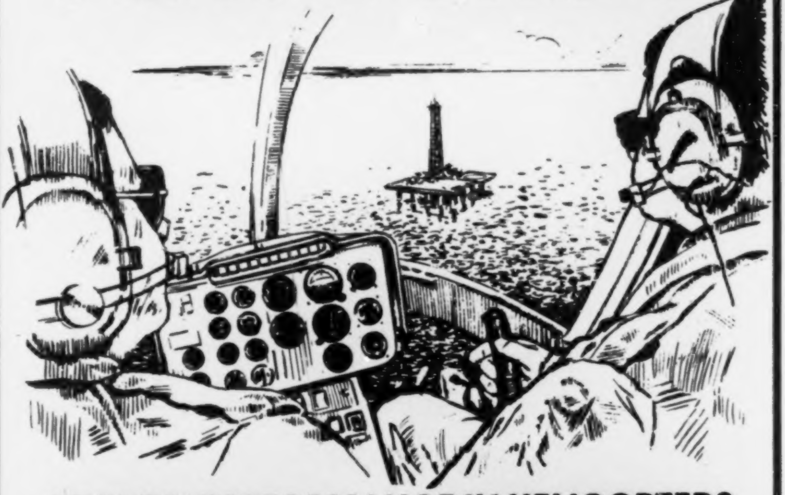
Weco Inc., Aerospace Systems
Burbank, CA U.S.

Western Aircraft Maintenance Inc.
Boise, ID U.S.

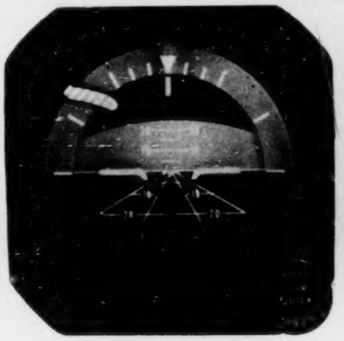
Westland Inc.
Arlington, VA U.S.

Yehnert Helicopter Inc.
Upland, CA U.S.

AIM GYROS



PROVEN PERFORMANCE IN HELICOPTERS



N
3
6
E
12
15
S
21
24
W
30
33
PUSH

510-1A HELICOPTER ATTITUDE GYRO

The AIM 510-1A is the first attitude gyro designed specifically for the high vibration environment of helicopter operations. It contains unique vibration resistant features such as high radial load capacity gimbal bearings; an extra long and extra large diameter tail shaft; and a completely ruggedized gimbal.

In addition, the 510-1A has an attractive, easy to read, multicolor display; and contains integral lighting as a standard feature.

If vibration induced failure of attitude gyros has been one of your problems, you need the AIM 510-1A.

800 SERIES SLAVED DG/ADF INDICATOR SYSTEM

When you've got both hands full of helicopter controls, you can do without the need to constantly correct the drift on a free DG. You can also do without the need to manually set the ADF indicator dial to the present heading in order to read bearing to the station.

What you can't do without is an AIM 800 Series Slaved DG/ADF Indicator System because it will perform both functions for you automatically! A simple pre-set procedure frees you from turning two additional knobs during flight. The system is available in either single or dual pointer configuration.

AIM designs and builds gyros specifically for helicopter operations. Call or write AIM today for complete details on these remarkable instruments.

AIM

AVIATION INSTRUMENT
MANUFACTURING CORP.
817 Dessau Rd., Austin, TX 78753
512/251-2351 Telex 767130

Associations & clubs

American Society of Hospital Based Emergency Services (ASHBEAMS)
Mission Viejo, CA U.S.

National Flight Nurses Association
Huntington, CA U.S.

Audio Systems & headset manufacturer

Baker Electronics, Inc.
Sarasota, FL U.S.

Carter Engineering Co., Inc.
Inglewood, CA U.S.

David Clark Company Inc.
Worchester, MA U.S.

Gables Engineering, Inc.
Coral Gables, FL U.S.

Audio Systems & headset repair

Carter Engineering Co., Inc.
Inglewood, CA U.S.

Avionics manufacturer

ARNAV Systems, Inc.
Portland, OR U.S.

Astronautics Corporation of America
Milwaukee, WI U.S.

Aviation Instrument Manufacturing Corp. (AIM)
Austin, TX U.S.

B & D Instruments, Inc.
Valley Center, KS U.S.

BVR, Inc.
Rockford, IL U.S.

Bendix General Aviation
Avionics Division
Fort Lauderdale, FL U.S.

Canadian Marconi Company
Montreal, PQ, Canada

Chelton, Inc.
Lewisville, TX U.S.

Collins Avionics
Cedar Rapids, IA U.S.

Communicatons Specialists Inc.
Orange, CA U.S.

Custom Aircraft Completions
Teterboro, NJ U.S.

Dayton-Granger, Inc.
Fort Lauderdale, FL U.S.

Electronic Display Systems Inc.
Hatfield, PA U.S.

Eliason Weather Radar
Chesterfield, MO U.S.

Foster Airdata Systems, Inc.
Columbus, OH U.S.

Gables Engineering, Inc.
Coral Gables, FL U.S.

Global Systems, Inc.
Irvine, CA U.S.

Gull, Inc.
Smithtown, NY U.S.

Hazeltine Corporation
Greenlawn, NY U.S.

Honeywell Inc.
Minneapolis, MN U.S.

Jaeger Aviation Corporation
Everett, WA U.S.

King Radio Corporation
Olathe, KS U.S.

Leigh Instruments Limited
Ottawa, ON, Canada

Litton Industries, Inc.
Moorpark, CA U.S.

Litton Systems Canada Limited
Rexdale, ON, Canada

Louis Newmark PLC
Surrey, England

3M Stormscope Weather Mapping
Columbus, OH U.S.

Maroc-Aviation
Paris, France

Narco Avionics Inc.
Fort Washington, PA U.S.

Negretti Aviation, Inc.
Nashua, NH U.S.

Northern Airborne Technology
Prince George, BC, Canada

Offshore Navigation, Inc.
New Orleans, LA U.S.

Penny & Giles Transducers Ltd.
Dorset, England

Penny & Giles Transducers Ltd.
Santa Monica, CA U.S.

S.F.I.M.
Massy, France

SFENA
Velizy-Villacoublay, France

SFENA Corporation
Grand Prairie, TX U.S.

Smiths Industries Aerospace
& Defense Systems, Inc.
Malvern, PA U.S.

Teledyne Avionics
Charlottesville, VA U.S.

Sperry Corporation
Phoenix, AZ U.S.

Teledyne Systems Company
Northridge, CA U.S.

Terra Corporation
Albuquerque, NM U.S.

Texas Instruments
Lewisville, TX U.S.

Universal Navigation Corporatio
Torrance, CA U.S.

Wulfsberg Electronics, Inc.
Overland Park, KS U.S.

Avionics repair

ARNAV Systems, Inc.
Portland, OR U.S.

Austin Jet Corp.
Austin, TX U.S.

BVR, Inc.
Rockford, IL U.S.

CMC Electronics, Inc.
E. Rutherford, NJ U.S.

Georgetown Aircraft Services
Georgetown, DE U.S.

Heli Orient (PTE) Ltd.
Singapore, Singapore

King Radio Corporation
Olathe, KS U.S.

Maroc-Aviation
Paris, France

Narco Avionics Inc.
Fort Washington, PA U.S.

Northern Airborne Technology
Prince George, BC, Canada

Offshore Navigation, Inc.
New Orleans, LA U.S.

Rotor-Flite, Inc.
Houston, TX U.S.

SPAR Aerospace, Ltd.
Toronto, ON, Canada

Smiths Industries Aerospace
& Defense Systems, Inc.
Malvern, PA U.S.

Tracor Aviation, Inc.
Goleta, CA U.S.

Battery & power equipment manufacturers/distributors

Aero Quality Sales Co.
Lyndhurst, NJ U.S.

Aircraft Parts Corporation
Farmingdale, NY U.S.

Christie Electric Corporation
Torrance, CA U.S.

Concorde Battery Corp.
W. Covina, CA U.S.

D + C – Airparts Corporation
Hialeah, FL U.S.

Hansome Control Products
Linden, NJ U.S.

SAFT America, Inc.
Valdosta, GA U.S.

Teledyne Battery Products
Redlands, CA U.S.

Utah Research & Development
W. Jordan, UT U.S.

Battery & power equipment repair/overhaul

D + C – Airparts Corporation
Hialeah, FL U.S.

Weco Inc., Aerospace Systems
Burbank, CA U.S.

Completions & modifications

Associated Air Center
Dallas, TX U.S.

Aviall
Dallas, TX U.S.

Custom Aircraft Completions
Teterboro, NJ U.S.

Eastern Aircraft Structural Repair
Arnprior, ON, Canada

Georgetown Aircraft Services
Georgetown, DE U.S.

Gull, Inc.
Smithtown, NY U.S.

Helicopter Leasing & Service
Tampa, FL U.S.

Micro-Surface Finishing
Wilton, IA U.S.

SFENA Corporation
Grand Prairie, TX U.S.

Soloy Conversions, Ltd.
Olympia Way, WA U.S.

Tracor Aviation, Inc.
Goleta, CA U.S.

Yehnert Helicopter Inc.
Upland, CA U.S.

Component & spare parts manufacturers/distributors

Acadian Airmotive, Inc.
Houma, LA U.S.

Aero Support, Inc.
Long Beach, CA U.S.

Aeronautical Accessories Inc.
Bristol, TN U.S.

The BF Goodrich Company
Akron, OH U.S.

Bell Helicopter Asia (Pte) Ltd.
Singapore, Singapore

Champion Spark Plug Company
Toledo, OH U.S.

Connecticut Machine Products, Inc.
Hauppauge, NY U.S.

John Cameron Aviation
Sydney, NSW, Australia

Daniels Manufacturing Corporation
Orlando, FL U.S.

Dart Aero Systems Inc.
Richmond, BC, Canada

Dorne & Margolin, inc.
Bohemia, NY U.S.

Electronic Display Systems Inc.
Hatfield, PA U.S.

Enstrom Helicopter Corporation
Menominee, MI U.S.

Fuji Industries Corporation
Santa Monica, CA U.S.

Geteca, USA-France
Encino, CA U.S.

Heli Plex Inc.
Arlington, TX U.S.

Heli-Mart Inc.
Long Beach, CA U.S.

Helicomb International, Inc.
Tulsa, OK U.S.

QUALITY INSTRUMENTATION
from
AVIATION INSTRUMENT SERVICES

25 years' experience to assist you in obtaining quality instruments, at a competitive price, with the best possible delivery.

AUTOPILOT COMPONENTS
FLIGHT INSTRUMENTS
PRESSURE TRANSMITTERS
ENGINE INSTRUMENTS
FLIGHT DIRECTORS
GYROS
ENCODING ALTIMETERS

We will assist you to locate and obtain any instrument you may require not immediately available from our own large inventory.

AVIATION INSTRUMENT SERVICES, INC.
12213 S.W. 131st Avenue, Bldg. A-7, Miami, Florida 33186
Tel: (305) 251-7200 Telex: 52-5110 APS-MIA

Component & spare parts manufacturers/distributors (continued)

Helicopter Logistics, Inc.
San Antonio, TX U.S.

Helicopter Support, Inc.
Orange, CT U.S.

Helicopter Welders of Canada
Richmond, BC, Canada

Hermetic Aircraft Instrument Corporation
Farmingdale, NY U.S.

Howmet Turbine Components Corporation
Greenwich, CT U.S.

Jet Turbine Service, Inc.
Fort Worth, TX U.S.

KAMATICS Corporation
Bloomfield, CT U.S.

Lester Industries, Inc.
San Antonio, TX U.S.

Lord Corporation
Erie, PA U.S.

M & N Plastics, Inc.
Springtown, TX U.S.

Mitsui & Co. (USA) Inc.
Irving, TX U.S.

Nordam/Lori
Tulsa, OK U.S.

Nozaki & Company Ltd.
Tokyo, Japan

PacAero
Burbank, CA U.S.

Pacific Airmotive Corporation
Burbank, CA U.S.

Perkins Aerospace Products
Fort Worth, TX U.S.

Plessey Aerospace Ltd.
Hampshire, England

Plessey Aerospace, USA
Wellington, KS U.S.

Plessey Aerospace
USA Marketing Office
Irving, TX U.S.

The Purdy Corporation
Manchester, CT U.S.

Rotair Industries, Inc.
Bridgeport, CT U.S.

SGL Auburn Spark Plug Co.
Auburn, NY U.S.

Semco Instruments, Inc.
N. Hollywood, CA U.S.

Sensor Systems, Inc.
Chatsworth, CA U.S.

Simmonds Precision
Miami, FL U.S.

J.T. Slocomb Company
S. Glastonbury, CT U.S.

Standard Aero Ltd.
Winnipeg, MB, Canada

Synergetics, Inc.
Dallas, TX U.S.

Systron-Donner
Concord, CA U.S.

Technical Development Co.
Glenolden, PA U.S.

Transaero, Inc.
Woodbury, NY U.S.

Van Dusen Air, Inc.
Minneapolis, MN U.S.

Weco Inc., Aerospace Systems
Burbank, CA U.S.

Component & parts repair

Airfoil Division
of Vac-Hyd Corporation
Grand Prairie, TX U.S.

Apeiron Technology, Inc.
El Segundo, CA U.S.

Atlantic Aviation Corporation
Teterboro, NJ U.S.

Chromalloy Division-Oklahoma
Midwest City, OK U.S.

Delta Rotorcraft Ltd.
Richmond, BC, Canada

FAS-Orient (Pte) Ltd.
Singapore, Singapore

Hamilton Standard
Windsor Locks, CT U.S.

Helicomb International, Inc.
Tulsa, OK U.S.

Helicopter Support, Inc.
Orange, CT U.S.

Helicopter Welders of Canada
Richmond, BC, Canada

Hermetic Aircraft Instrument
Farmingdale, NY U.S.

Kinzie Industries, Inc.
Alva, OK U.S.

Lord Corporation
Erie, PA U.S.

Mata Jerusalem Helicopters
Jerusalem, Israel

Meridian Heliflight, Inc.
Prince George, BC, Canada

National Airmotive
Oakland, CA U.S.

Nordam/Lori
Tulsa, OK U.S.

Orlando Blade Technologies Inc
Sanford, FL U.S.

The Purdy Corporation
Manchester, CT U.S.

Ro-Wing Aviation, Inc.
Camarillo, CA U.S.

Rotor Blades, Inc.
Stockton, CA U.S.

Semco Instruments, Inc.
N. Hollywood, CA U.S.

Sky Controls, Inc.
Sun Valley, CA U.S.

J.T. Slocomb Company
S. Glastonbury, CT U.S.

Systron-Donner
Concord, CA U.S.

Turbine Casing
of Vac-Hyd Corporation
Arlington, TX U.S.

Union Carbide Coatings Service
Indianapolis, IN U.S.

Uscan Aviation Sales Ltd.
Alliston, ON, Canada

Vac-Aero International, Inc.
Oakville, ON, Canada

Data/research/title services

Aero Tech Publications, Inc.
Old Bridge, NJ U.S.

Airborne Data Systems Ltd.
Richmond, BC, Canada

Aircraft Technical Publishers
Brisbane, CA U.S.

Aviation Analysis, Inc.
Carson City, NV U.S.

Camp Systems, Inc.
Ronkonkoma, NY U.S.

Insured Aircraft Title Service, Inc.
Oklahoma City, OK U.S.

Inventory Locator Service Inc.
Memphis, TN U.S.

Engine manufacturer

Airwork Corporation
Millville, NJ U.S.

Allison Gas Turbine Division
Indianapolis, IN U.S.

Avco Lycoming, Williamsport Division
Williamsport, PA U.S.

Avco Lycoming, Stratford Division
Stratford, CT U.S.

Garrett Corporation
Los Angeles, CA U.S.

General Electric Company
Lynn, MA U.S.

Kawasaki Heavy Industries, Ltd
Minato-Ku, Tokyo, Japan

Pratt & Whitney Canada, Inc.
Longueuil, PQ, Canada

Rolls-Royce Limited
Watford, England

Teledyne Neosho
Neosho, MO U.S.

Transupport, Inc.
Shelton, CT U.S.

Turbomeca
Bizanos, France

Engine repair

Airwork Corporation
Millville, NJ U.S.

Avco Lycoming, Williamsport Division
Williamsport, PA U.S.

Avco Lycoming, Stratford Division
Stratford, CT U.S.

Aviall
Dallas, TX U.S.

FFV Maintenance
Linkoping, Sweden

Hawker Pacific Pty. Ltd.
Condell, NSW, Australia

Helicopter Services, Inc.
Warwick, RI U.S.

Indianapolis Heliport Corporation
Indianapolis, IN U.S.

II Morrow, Inc.
Salem, OR U.S.

National Airmotive
Oakland, CA U.S.

Negretti Aviation, Inc.
Nashua, NH U.S.

Pacific Airmotive Corporation
Burbank, CA U.S.

Pratt & Whitney Canada, Inc.
Longueuil, PQ, Canada

Ro-Wing Aviation, Inc.
Camarillo, CA U.S.

Rolls-Royce Limited
Watford, England

Rotor-Flite, Inc.
Houston, TX U.S.

Standard Aero Ltd.
Winnipeg, MB, Canada

Teledyne Neosho
Neosho, MO U.S.

Turbo West, Inc.
Broomfield, CO U.S.

Vac-Aero International, Inc.
Oakville, ON, Canada

Van Dusen Air, Inc.
Minneapolis, MN U.S.

Western Aircraft Maintenance Inc.
Boise, ID U.S.

Fuel cells, filters & pumps manufacturers/distributors

Aircraft Porous Media, Inc.
East Hills, NY U.S.

Aviation Instrument Services
Miami, FL U.S.

Chandler Evans
West Hartford, CT U.S.

FPT Industries, Ltd.
Hampshire, England

Facet Enterprises, Inc.
Greensboro, NC U.S.

Hamilton Standard
Windsor Locks, CT U.S.

Lucas Aerospace Ltd.
West Midlands, England

Lucas Industries Inc.
Irving, TX U.S.

P.E.D. - Pooleys
Fremont, CA U.S.

Parker Hannifin General Aviation Branch
Elyria, OH U.S.

Plessey Aerospace Ltd.
Hampshire, England

Plessey Aerospace, USA
Wellington, KS U.S.

Plessey Aerospace USA Marketing Office
Irving, TX U.S.

Simplex Manufacturing Company
Portland, OR U.S.

TRW Aircraft Components
Cleveland, OH U.S.

Velcon Filters, Inc.
San Jose, CA U.S.

Fuel cells, filters & pumps repair/overhaul

Chandler Evans
West Hartford, CT U.S.

Chromalloy Compressor
San Antonio, TX U.S.

Simmonds Precision
Miami, FL U.S.

TRW Aircraft Components
Cleveland, OH U.S.

Ground power & support equipment manufacturers/distributors

Aero Quality Sales Co.
Lyndhurst, NJ U.S.

Brackett Aviation Co., Inc.
Kingman, AZ U.S.

Champion Spark Plug Company
Toledo, OH U.S.

Christie Electric Corporation
Torrance, CA U.S.

Concorde Battery Corp.
W. Covina, CA U.S.

Daniels Manufacturing Corporation
Orlando, FL U.S.

Energy Tactics, Inc.
Bohemia, NY U.S.

Foxtronics, Inc.
Dallas, TX U.S.

Graphic Datakits International
Fort Worth, TX U.S.

Hansome Control Products
Linden, NJ U.S.

Hobart Brothers Company
Troy, OH U.S.

Howmet Turbine Components Corporation
Greenwich, CT U.S.

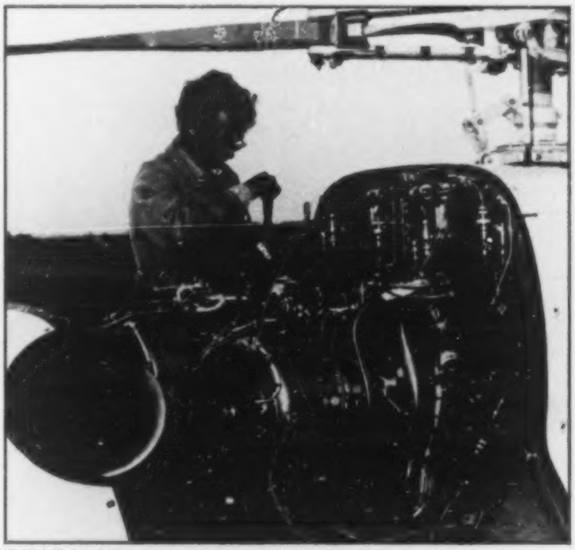
Kell-Strom Tool Co., Inc.
Wethersfield, CT U.S.

Patterson Enterprises Inc.
Van Nuys, CA U.S.

Taylor Aircraft Sales, Inc.
Cushing, OK U.S.

Teledyne Battery Products
Redlands, CA U.S.

Tennant Co.
Minneapolis, MN U.S.



TM 319 Turboshaft

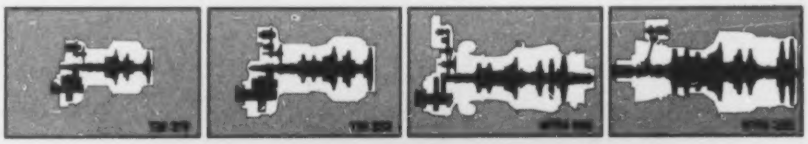
The Right Answer

Turbo, Turboshafts, Turbojets... TURBOMECA

TURBOMECA : a name which has been, and will continue to be, inseparable from gas turbine engineering. Performance, reliability, ruggedness – and in addition simplicity – also spell TURBOMECA. Its engineering know-how, based on nearly 50 years of experience unmatched in its diversity, consists precisely in its ability to combine all these requirements in order to achieve the best compromise between cost, efficiency and simplicity. But there's more to it than that, for such expertise is attested to also by the extensive integration of the different engine functions, and notably of the control system which TURBOMECA is the only engine manufacturer in the world to have developed(*). TURBOMECA, not least of all, is synonymous with a comprehensive range of products and applications, and also with product support in which technology is at the customer's service first and foremost.

SO NOW YOU KNOW WHY TURBOMECA IS... THE RIGHT ANSWER.

(*) Including the full-authority electronic control systems which equip all our new-generation engines (FADEC).



TURBOMECA

Bordes, 64320 BIZANOS - France - Tél. : (33) 59.32.84.37 - Télex : 560928

PEMA 2B

Ground power & support equipment manufacturers/distributors (continued)

Trilectron Industries, Inc.
Hawthorne, NJ U.S.

Tronair, Inc.
Holland, OH U.S.

Tug-A-Lug, Inc.
Lancaster, CA U.S.

Utah Research & Development
W. Jordan, UT U.S.

Ground power & support equipment repair/overhaul

Hobart Brothers Company
Troy, OH U.S.

Lester Industries, Inc.
San Antonio, TX U.S.

Simmonds Precision
Miami, FL U.S.

Taylor Aircraft Sales, Inc.
Cushing, OK U.S.

Trilectron Industries, Inc.
Hawthorne, NJ U.S.

Hardware & fasteners manufacturers/distributors

Miller Industrial Tools, Inc.
Van Nuys, CA U.S.

Olympic Fastening Systems, Inc
Downey, CA U.S.

Heating & air conditioning manufacturers/distributors

Aero Engineering Corporation
Clearwater, FL U.S.

Casey Copter Accessories, Ltd.
Dorval, PQ, Canada

Fairchild Control Systems Co.
Manhattan Beach, CA U.S.

Heating & air conditioning repair/overhaul

Casey Copter Accessories, Ltd.
Dorval, PQ, Canada

Fairchild Control Systems, Co.
Manhattan Beach, CA U.S.

Helicopter sales (Used)

Aero Support, Inc.
Long Beach, CA U.S.

Aircraft Marketing, Ltd.
Boca Raton, FL U.S.

Austin Jet Corp.
Austin, TX U.S.

Bow Rotors
Lancaster, CA U.S.

Frontier Pacific Aircraft Industries, Inc.
Long Beach, CA U.S.

Heli-Mart, Inc.
Long Beach, CA U.S.

Kinzie Industries, Inc.
Alva, OK U.S.

Mira Slovak Aviation
Santa Paula, CA U.S.

Mitsui & Company (USA), Inc.
Irving, TX U.S.

Nash Helicopter Associates, Ltd.
Warks, England

Nozaki & Company, Ltd.
Tokyo, Japan

PLM Transportation Equipment Corp.
San Antonio, TX U.S.

PacAero
Burbank, CA U.S.

Shannon Financial Corporation
Pleasant Hill, CA U.S.

Soloy Conversions, Inc.
Olympia, WA U.S.

Sony Trading Corporation
Tokyo, Japan

Heliport consulting/planning

Aviation Business Consultants, Inc.
Sarasota, FL U.S.

Aviation Consulting, Inc.
Manhasset, NY U.S.

Helicopter Consulting Associates, Inc.
Porterville, CA U.S.

Heliport Systems, Inc.
Morristown, NJ U.S.

Lincoln Airpark
Rancho Cordova, CA U.S.

Marathon Oil Company
Findlay, OH U.S.

Norsk-Lander, Inc.
Tacoma, WA U.S.

Oil Industry Services A/S
Vaagsbygd, Norway

Soloy Conversions, Ltd.
Olympia Way, WA U.S.

Vertical Aeronautics International
Van Nuys, CA U.S.

AIRCONDITIONING

The qualities of the Casey heater, reliable design and effective performance have now been applied to helicopter aircon-ditioning.

The result? The system you have been waiting for. 24,000 BTU's of cooling with no bleed air and no interference with the rotor drive system.

Instead we have a smooth running engine driven gear box to give you the performance you need.

Developed jointly with Fairchild Control Systems Company this system belongs on your helicopter.

Ask about our 2,400 hour/24 month warranty.

Contact
CASEY COPTER
ACCESSORIES
LIMITED
511 Lepine
Dorval, Quebec
Canada H9P 2S9
or call
Mike Casey
(514)
636-6155

SIMPLY.......THE BEST

CASEY COPTER
Accessories Limited

FAIRCHILD
CONTROL SYSTEMS COMPANY

THE DRIVING FORCE IN HELICOPTER AIRCONDITIONING

Heliport equipment & lighting manufacturers/distributors

Cardion Electronics
Holtsville, NY U.S.

DeVore Aviation Corporation
Albuquerque, NM U.S.

Downing Electronics, Inc.
Northridge, CA U.S.

Energy Tactics, Inc.
Bohemia, NY U.S.

Heliport Systems, Inc.
Morristown, NJ U.S.

Oil Industry Services A/S
Vaagsbygd, Norway

P.E.D. - Pooleys
Fremont, CA U.S.

Russellstoll Division/Midland Ross
Livingston, NJ U.S.

Vertical Aeronautics International
Van Nuys, CA U.S.

Hydraulic systems/components manufacturers/distributors

Abex Corporation
Oxnard, CA U.S.

Avmar Incorporated
Grand Prairie, TX U.S.

HR Textron, Inc.
Valencia, CA U.S.

Parker Hannifin General Aviation Branch
Elyria, OH U.S.

Hydraulic systems/component repair/overhaul

Abex Corporation
Oxnard, CA U.S.

Accessory Service Inc.
Valencia, CA U.S.

Aircraft Technical Machine, Inc.
Tucson, AZ U.S.

FAS-Orient (Pte) Ltd.
Singapore, Singapore

Flight Accessory Services
Sun Valley, CA U.S.

HR Textron, Inc.
Valencia, CA U.S.

Sky Controls, Inc.
Sun Valley, CA U.S.

Instruments, gauges, switches manufacturers/distributors

Aero Mechanism, Inc.
Chatsworth, CA U.S.

Aeronetics
Elk Grove Village, IL U.S.

Ametek, U.S. Gauge Division
Paoli, PA U.S.

Aviation Instrument
Austin, TX U.S.

Aviation Instrument Services
Miami, FL U.S.

B & D Instruments, Inc.
Valley Center, KS U.S.

A. Biederman, Inc.
Glendale, CA U.S.

Castleberry Instruments Corporation
Austin, TX U.S.

Chadwick, Inc.
Sherwood, OR U.S.

Fujinon, Inc.
Scarsdale, NY U.S.

Honeywell Inc.
Minneapolis, MN U.S.

Howell Instruments, Inc.
Fort Worth, TX U.S.

Instrument Specialities Co.
Euless, TX U.S.

Jaeger Aviation Corporation
Everett, WA U.S.

Kollsman Instrument Company
Merrimack, NH U.S.

Litton Systems Canada Limited
Rexdale, ON, Canada

Louis Newmark PLC
Surrey, England

3M Stormscope Weather Mapping
Columbus, OH U.S.

Masco Service Corporation
Southlake, TX U.S.

McAllister Engineering
Kent, WA U.S.

Measurement Systems
Seattle, WA U.S.

S.F.I.M.
Massy, France

Symbolic Displays, Inc.
Irvine, CA U.S.

Terra Corporation
Albuquerque, NM U.S.

Instruments, gauges, switches repair/overhaul

Barfield Instrument Corporation
Atlanta, GA U.S.

A. Biederman, Inc.
Glendale, CA U.S.

Castleberry Instruments Corporation
Austin, TX U.S.

Executive Instruments, Inc.
Addison, TX U.S.

Instrument Specialities Co.
Euless, TX U.S.

II Morrow, Inc.
Salem, OR U.S.

Masco Service Corporation
Southlake, TX U.S.

Symbolic Displays, Inc.
Irvine, CA U.S.

Insurance & financial services

Aggressive Aviation Insurance
Northridge, CA U.S.

Air-Sure, Ltd.
Plano, TX U.S.

Airclaims, Inc.
Bethesda, MD U.S.

Alexander & Alexander, Inc.
New York, NY U.S.

Associated Aviation Underwriters
New York, NY U.S.

Aviation Office of America, Inc.
Dallas, TX U.S.

Bayly, Martin & Fay Aviation Insurance Services, Inc.
Los Angeles, CA U.S.

Bayly Martin & Fay of
Washington, Inc.
Seattle, WA U.S.

Bayly, Martin & Fay, Inc.
Philadelphia, PA U.S.

C.E. Heath & Company (Aviation) Ltd.
London, England

Dale & Company Limited
Montreal, PQ, Canada

Ed Marshall Insurance, Ltd.
Salem, VA U.S.

Finalco Aircraft Leasing, Inc.
McLean, VA U.S.

Frank B. Hall International
Los Angeles, CA U.S.

Fred S. James & Company of Georgia, Inc.
Atlanta, GA U.S.

General Electric Credit Corporation
Wilton, CT U.S.

Helilease International Inc.
Pasadena, CA U.S.

Houston Casualty Company
Houston, TX U.S.

Insurance Company of North America
New York, NY U.S.

Insured Aircraft Title Service, Inc.
Oklahoma City, OK U.S.

Inter Assessoria Aeronautica Ltda.
Rio de Janeiro, Brazil

Johnson & Higgins
New York, NY U.S.

Lawton-Byrne-Bruner
Saint Louis, MO U.S.

Marsh & McLennan, Inc.
New York, NY U.S.

O'Beirne, Nobert & Associates
Greenfield Park, PQ, Canada

Ocean Air Insurors Ltd.
Saint Louis, MO U.S.

PLM Transportation Equipment Corporation
San Antonio, TX U.S.

Reed Stenhouse, Inc.
New York, NY U.S.

Rollins Burdick Hunter
Wichita, KS U.S.

Southeastern Aviation Underwriters, Inc.
Atlanta, GA U.S.

Southern Marine & Aviation
Underwriters, Inc.
New Orleans, LA U.S.

Stephen L. Way International
Roseland, NJ U.S.

Stewart Smith/
Stewart Wrightson Organization
Chicago, IL U.S.

USAIG (U.S. Aircraft Insurance Group)
New York, NY U.S.

Publishing

Aviation Equipment Maintenance Magazine
Chicago, IL U.S.

Aviation Maintenance Publishers, Inc.
Riverton, WY U.S.

Business & Commercial Aviation
White Plains, NY U.S.

Flight International Magazine
New York, NY U.S.

Flying Magazine
New York, NY U.S.

HELICOPTER International Magazine
Avon, England

Interavia Publishing Group
Geneva-Cointrin, Switzerland

The Official Helicopter Blue Book
Skokie, IL U.S.

Professional Pilot Magazine
Washington, DC U.S.

Publishers for Conventions, Inc.
Pittsburgh, PA U.S.

Rotor & Wing International
Peoria, IL U.S.

The Shephard Press Ltd.
Bucks, Burham, England

Service Industries Consultant

Aero-Lift Consultants
Middleboro, MA U.S.

Airborne Data Systems Ltd.
Richmond, BC, Canada

Alexander & Alexander, Inc.
New York, NY U.S.

Aviation Analysis, Inc.
Carson City, NV U.S.

Aviation Consulting Inc.
Manhasset, NY U.S.

Aviators Hot Line
Fort Dodge, IA U.S.

Bow Rotors
Lancaster, CA U.S.

Geostar Corporation
Princeton, NJ U.S.

Helicopter Consulting Associates, Inc.
Porterville, CA U.S.

"In DEFIANCE of accepted
rules and customs . . ."

LIFT
ISBN 0-9614498-0-2
Joe Stein

"Listen to the voices of experience . . . those who have seen strange lands, found excitement, fun and adventures without precedent."

A big, untold story of flight – not fast, not high – as helicopters zip into places nothing else can reach . . . exploring **INNER SPACE.**

LIFT tells what "high tech" means to our daily lives . . . because nothing else lifts like a helicopter.

. . . an educational
informative
look at life . . .

LIFT

205 page paperback
47 photos
full color cover
$7.95

ask your bookstore
or

The Zig Zag Papers
Box 247
Zig Zag, Oregon 97049

(503) 622-3425

(add $1.00 by mail)

Ask about volume rates.

Service industries Consultant (continued)

Helicopter Technology Company, Inc.
Decatur, GA U.S.

Helicopter Logistics, Inc.
San Antonio, TX U.S.

Helilease International Inc.
Pasadena, CA U.S.

Helitune Ltd.
Worcester, England

Hughes Aviation Services
Las Vegas, NV U.S.

Inventory Locator Service Inc.
Memphis, TN U.S.

Lincoln Airpark
Rancho Cordova, CA U.S.

Lockheed DataPlan, Inc.
Los Gatos, CA U.S.

Marketing & Planning Group Inc.
El Segundo, CA U.S.

Marsh & McLennan, Inc.
New York, NY U.S.

Ocean Air Insurors Ltd.
Saint Louis, MO U.S.

Professional Helicopter Services, Inc.
Timmons, ON, Canada

Standard Helicopter Corporation
Portland, OR U.S.

Summit Design & Marketing Inc
Annapolis, MD U.S.

Transamerica Airlines
Oakland, CA U.S.

University of Southern California
Los Angeles, CA U.S.

Simulators/trainers manufacturers/distributors

Atc Flight Simulator Co.
Santa Monica, CA U.S.

Frasca International, Inc.
Champaign, IL U.S.

Pacer Systems
Burlington, MA U.S.

Rediffusion Simulation Ltd.
Sussex, England

Survival equipment manufacturers/distributors

Accessory Service Inc.
Valencia, CA U.S.

Air & Sea Inflatables, Inc.
Lafayette, LA U.S.

Apeiron Technology, Inc.
El Segundo, CA U.S.

The BF Goodrich Company
Akron, OH U.S.

Beaufort Air-Sea Equipment Ltd
Merseyside, England

Chelton, Inc.
Lewisville, TX U.S.

Communicatons Specialists Inc.
Orange, CA U.S.

Dart Aero Systems Inc.
Richmond, BC, Canada

Dayton-Granger, Inc.
Fort Lauderdale, FL U.S.

Dorne & Margolin, Inc.
Bohemia, NY U.S.

Eastern Aero Marine
Miami, FL U.S.

FPT Industries, Ltd.
Hampshire, England

The GIC Group
New Rochelle, NY U.S.

H. Koch & Sons Division
Anaheim, CA U.S.

Hoover Industries, Inc.
Miami, FL U.S.

Leigh Instruments Limited
Ottawa, ON, Canada

SEI Industries Ltd.
Vancouver, BC, Canada

SOS Rescue & Survival Tool
Fresno, CA U.S.

Switlik Parachute Company, Inc.
Trenton, NJ U.S.

Tool manufacturers/distributors

Helicopter Welders of Canada
Richmond, BC, Canada

SOS Rescue & Survival Tool
Fresno, CA U.S.

Transmission/drive components manufacturers/distributors

Aircraft Gear Corporation
Chicago, IL U.S.

Transmission/drive components repair/overhaul

Aircraft Gear Corporation
Chicago, IL U.S.

Helicopter Support Australia
Kununurra, Australia

Ramapo Helicopters, Inc.
Spring Valley, NY U.S.

SPAR Aerospace, Ltd.
Toronto, ON, Canada

Schweizer Aircraft Corporation
Elmira, NY U.S.

Test & monitoring equipment manufacturers/distributors

Barfield Instrument Corporation
Atlanta, GA U.S.

Chadwick-Helmuth Co.
El Monte, CA U.S.

Computing Technologies for Aviation
Charlottesville, VA U.S.

Cyberstar
Santa Rosa, CA U.S.

Howell Instruments, Inc.
Fort Worth, TX U.S.

Kell-Strom Tool Company, Inc.
Wethersfield, CT U.S.

Kollsman Instrument Company
Merrimack, NH U.S.

The Marvel Manufacturing Company
Fairfield, NJ U.S.

Measurement Systems International
Seattle, WA U.S.

Olympus Corporation of America
Lake Success, NY U.S.

Pacer Systems
Burlington, MA U.S.

Patterson Enterprises Inc.
Van Nuys, CA U.S.

Scientific-Atlanta, Inc.
San Diego, CA U.S.

Simmonds Precision
Miami, FL U.S.

Technical Development Co. (Tedeco)
Glenolden, PA U.S.

Teledyne Avionics
Charlottesville, VA U.S.

Mechanic training schools

FlightSafety International
Flushing, NY U.S.

Pilot training schools

Atc Flight Simulator Co.
Santa Monica, CA U.S.

Computer Training Systems, Inc
Lafayette, LA U.S.

FlightSafety International
Flushing, NY U.S.

Hynes Aviation Industries, Inc.
Frederick, OK U.S.

EXPLORE CANADA

The second largest aviation market in the world is right next door.

Call us today for a media kit and a sample copy of **CANADIAN AVIATION**. We'll be happy to help you explore Canada — the world's second largest aviation market.

Contact Paul Doyle,
Publisher
(416) 596-5793

Canadian Aviation
CANADA'S NATIONAL AVIATION MAGAZINE

Maclean Hunter Building, 777 Bay Street, Toronto, Ontario, Canada M5W 1A7 Telex: 06-219547

You can (and should) share in the many benefits of membership in the Helicopter Association

Regardless of what your role may be in the helicopter industry ... you will benefit measurably from membership in the Helicopter Association International.

The Helicopter Association International was created in 1948 to advance the professional stature of the commercial helicopter operator and to promote the safe and effective use of the helicopter in commerce and public service.

HAI membership overview

40% of the members are helicopter operators,
35% are associate members ... manufacturers or suppliers to the industry, and
25% are affiliate organizations or individuals interested in following industry events.

HAI's balanced membership mix truly represents the varied components of the entire civil helicopter industry. HAI is a collective forum which *equally* represents its operator members — small and large.

HAI member profile

67% of the HAI operator members operate five or fewer helicopters, and
88% of the associate members are mid-to-small sized firms.

Regardless of your company's size or role in the industry,
there is a place for you in the
Helicopter Association International.

To find out how you can benefit from membership in HAI, please write today for membership information and an application. Just return the post-paid card on page 80A. Turn to page 197 for a detailed look at HAI.

Helicopter
Association
International

Uniforms & helmets

David Clark Company Inc.
Worchester, MA U.S.

Fitz-Wright Suits Ltd.
Surrey, BC, Canada

Flight Suits, Ltd.
El Cajon, CA U.S.

Texas Apparel, Inc.
Amarillo, TX U.S.

Other

American Society of Hospital Based Emergency Medical Services (ASHBEAMS)
Mission Viejo, CA U.S.

ASCO Flight Watch
Atlanta, GA U.S.

Aerospatiale Helicopter Corporation
Grand Prairie, TX U.S.

Airclaims, Inc.
Bethesda, MD U.S.

Aircraft Modular Products
Miami, FL U.S.

Aircraft Technical Publishers
Brisbane, CA U.S.

All System Aerospace International, Inc.
Hauppauge, NY U.S.

Alyeska Pipeline Service Company
Anchorage, AK U.S.

American ACMI
Stamford, CT U.S.

Arabian American Oil Company
Dhahran, Saudi Arabia

Arrow International
Dallas, TX U.S.

Atlantic Richfield Company
Dallas, TX U.S.

Avfuel Corporation
Ann Arbor, MI U.S.

Aviators Hot Line
Fort Dodge, IA U.S.

Avio Sales & Service Corporation
Holmdel, NJ U.S.

Boeing of Canada Ltd.
Winnipeg, MB, Canada

Breitling, Halcyon Watch Co.
Norwalk, CT U.S.

Camp Systems, Inc.
Ronkonkoma, NY U.S.

Canadian Marconi Company
Montreal, PQ, Canada

Cardion Electronics
Holtsville, NY U.S.

Chase, Rotchford, Drukker & Bogust
Los Angeles, CA U.S.

Composite Technology, Inc.
Stockton, CA U.S.

Computer Training Systems, Inc
Lafayette, LA U.S.

Computing Technologies for Aviation, Inc.
Charlottesville, VA U.S.

Daniel Systems, Inc.
Opa Locka, FL U.S.

Eberhard Klemens Company
Oakbrook, IL U.S.

Embry-Riddle Aeronautical
University Brunnell, FL U.S.

Fitz-Wright Suits Ltd.
Surrey, BC, Canada

Geophysical Service Inc.
Dallas, TX U.S.

Geostar Corporation
Princeton, NJ U.S.

Golar Metal, Inc.
Lionville, PA U.S.

Graphic Datakits International
Fort Worth, TX U.S.

Hazeltine Corporation
Greenlawn, NY U.S.

Heavylift Marketing
Houston, TX U.S.

Helicopter Technology Co., Inc
Decatur, GA U.S.

Helitune Ltd.
Worcester, England

Hitchcock Industries, Inc.
Dennison, TX U.S.

Imperial Oil Limited
Toronto, ON, Canada

Jet Turbine Service, Inc.
Forth Worth, TX U.S.

M & N Plastics, Inc.
Springtown, TX U.S.

Marathon Oil Company
Findlay, OH U.S.

Micro-Surface Finishing
Wilton, IA U.S.

Mira Slovak Aviation
Santa Paula, CA U.S.

Norsk-Lander, Inc.
Tacoma, WA U.S.

PLM Transportation Equipment Corporation
San Antonio, TX U.S.

Penny & Giles Transducers Ltd.
Dorset, England

Penny & Giles Transducers Ltd.
Santa Monica, CA U.S.

Perkins Aerospace Products
Fort Worth, TX U.S.

Precision Forgings, Inc.
Valley Park, MO U.S.

Professional Helicopter Services
Timmons, ON, Canada

Rollins Burdick Hunter
Wichita, KS U.S.

SGL Auburn Spark Plug Company
Auburn, NY U.S.

Sensor Systems, Inc.
Chatsworth, CA U.S.

Sermatech International Inc.
Limerick, PA U.S.

Shannon Financial Corporation
Pleasant Hill, CA U.S.

Sky Sign
Miami, FL U.S.

Southern Air Transport, Inc.
Miami, FL U.S.

Spectrolab, Inc.
Sylmar, CA U.S.

Summit Design & Marketing Inc.
Annapolis, MD U.S.

Swedlow, Inc.
Garden Grove, CA U.S.

TA Manufacturing Co.
Glendale, CA U.S.

TOTAL Compagnie Francais
Cedex, France

Tennant Company
Minneapolis, MN U.S.

Texaco, Inc.
Teterboro, NJ U.S.

Texstar Plastics Company
Grand Prairie, TX U.S.

Tiodize Company, Inc.
Huntington Beach, CA U.S.

Transamerica Airlines
Oakland, CA U.S.

United Industries, Inc.
Winter Springs, FL U.S.

University of Southern California
ISSM—Extension & In-service Programs
Los Angeles, CA U.S.

"THANKS TO MY DAVID CLARK HEADSET, I'M STILL FLYING."

Russ Johnson

"My 38 years of flying in noisy aircraft resulted in a serious hearing loss. My doctor recommended a David Clark Company Headset because any further hearing loss and I wouldn't be able to fly.

For the past 5 years I've been wearing the David Clark Company Headset and my hearing has not deteriorated. I'm sold on it because I'm still working as chief pilot and still able to fly.

I'd recommend a David Clark Company Headset for every pilot. A hearing loss could ground you — why risk it!"

PILOT PROFILE: Russ Johnson today is Chief Pilot for East Coast Helicopter, Cumberland, RI. He has logged over 12,000 flying hours in 38 years, including both military and commercial flying. Russ earned a Master Aviator rating in the U.S. Army and currently holds COMM, SMEL, HEL INST, CFI.

Write for FREE Catalog.

David Clark
COMPANY INCORPORATED
376 Franklin St., Worcester, MA 01604
(617) 756-6216 Telex: 920482

See us at HAI booth #1721

We've become the leading manufacturer of light helicopter engines by running a tight ship. No loose ends, no sloppy work.

We did it by learning how to produce reliable efficient light helicopter engines.

We stayed in front by learning how to combat the biggest enemies of the Armed Forces: cost overruns, inflation, and production delays. We had to meet demanding accelerated production schedules during wartime, and had to meet them while also maintaining our high quality control standards.

Because a battlefield is just

Allison didn't become the largest manufacturer of light helicopter engines by winging it.

the wrong place to find out your engine is not up to par.

Allison has produced 20,000 model 250 series engines with at least 36,000,000 flight hours logged on them.

Over 70% of the free world's light helicopter turbine engines are Allison engines. In addition, we have 50 years of experience supplying aircraft engines to the U. S. military. The Allison Gas Turbine Division doesn't leave details up in the air. If you'd like to see our credentials, take a look at our combat record.

Allison

Alphabetical listing of operators worldwide

This directory contains the most useable and complete listing of helicopter operators ever assembled. We have included every known operator in the world in the alphabetical section. HAI member listings are shown in bold face type and include detailed information on personnel, operators and equipment.

Immediately following the alphabetical directory is the member operators matrix of services. Organized geographically by state or country, by city within the state, then alphabetically, it lists the services provided by each HAI member operator.

We recommend the use of HAI member operators whenever possible, as they subscribe to the HAI Code of Ethics, which can be found in the HAI structure and programs section of this Helicopter Annual.

A & J Construction Co., Inc.
Homedale, ID

A L C Airlift Corporation
Pitt Meadows, BC, Canada

A.T.&T.
Morristown Municipal Airport
Morristown, NJ 07960
☎201-326-1400 ☐7109867459
Aviation Division Manager: Kenneth R. Smith
Chief Pilot: William C. Beversluis
Operations: Corporate (US part 91, not for hire)
Helicopters: **2**-109A

AA Aircraft Charter
Englewood, CO

AAT Helicopters
Paris, France

AG Air Leasing Service, Inc.
Waterloo, NY

AG Helicopters, Inc.
Honolulu, HI

AGRAR, S.A.
Monasterio de Coqullada
Zaragoza, 14, Spain
☎290330 ☐58136
President: Pedro de Wenetz
Operations Manager: Tomas Gallego
Chief Pilot: Vicente Rosello Santiago de Serret
Operations: Agriculture, Air carrier (US part 127),
Air taxi/charter (US part 135), EMS/air ambulance,
Construction, Executive transport, External cargo,
Forestry, General, Photography, Pilot training school,
Repair station (FAA certified), Sightseeing
Helicopters: **2**-315B,**2**-341G,**2**-R22H

ANALAR Corporation
Piscataway, NJ

AOK Helicopter Charter Service
Pompano Beach, FL

ATA Asahi Transna Airways P.T.
30th Floor, Ratu Plaza Office Bldg
Jalan Jenderal Sudirmm,Senayan
Jakarta, Indonesia
☎711061 ☐47426 MC JKT
President: Kohei Saitch
Operations: Air taxi/charter (US part 135),
Executive transport, Exploration, Forestry, general,
Logging, Offshore, Photography
Helicopters: **2**-B212,**9**-206B

Abelag Aviation
Brussels, Belgium

Abu Dhabi Helicopters Limited
P.O. Box 2723
Abu Dhabi, United Arab Emirates
☎722733 ☐23409
General Manager: Ali Saeed Al-Shamsi
Operations Manager: Philip N. Stevens
Deputy Operations Manager: George G. Tucker, III
Engineering Manager: William R. Foote
Operations: Air taxi/charter (US part 135),
EMS/air ambulance, Executive transport,
External cargo, Offshore,
Patrol (power, pipeline, buried cable),
Photography, Pollution detection/monitoring
Helicopters: **7**-206B,**26**-B212

Acadian Ambulance Service
Lafayette, LA

Ace Helikopters B.V.
Vliegveld Lelystad, Netherlands

Action Helicopter Servicenter
Las Vegas, NV

Adams County Sheriff
Baltimore, OH

Advance Construction Co.
Hinsdale, IL

Aer Agricola
Rome, Italy

Aerial Patrols, Inc.
North Canton, OH

Aerial Services, Inc.
Norton, VA

Aerial Spraying (NZ) Ltd.
Feilding, New Zealand

Aero Air, Inc.
Hillsboro, OR

Aero Arctic Limited
Yellowknife, NF, Canada

Aero Asahi Corporation (Asahi Koyo)
Sunshine 60, 32nd Fl, No.1-1,3-chome
Higashi-Ikebukuro, Toshima-ku
Tokyo 170, Japan
☎03-988-1011 ☐2723355
President: Hidenori Takahashi
Executive Managing Director: Wataru Nishikawa
Operations: Agriculture, Air carrier (US part 127),
Air taxi/charter (US part 135), Commuter air carrier
(scheduled), Construction, Executive transport,
External cargo, Fire control/support, Forestry, general,
Government contracting, Logging, Offshore, Patrol
(power, pipeline, buried cable), Photography, Private
owners, Repair station (FAA certified), Sightseeing,
Skiing, Traffic surveillance
Helicopters: **2**-330J,**8**-B212,**6**-B412,**34**-206B,
4-204B,**3**-214B,**11**-B47G,**9**-350B,**2**-355F,
1-332L,**1**-S76A,**1**-214ST,**1**-Mi-8,**2**-BK117,**1**-BO105C

Aero Color
Frankfurt, Germany

Aero Contractors Co of Nigeria
Lagos, Nigeria

Aero Conversion Service Co.
Tsu-City, Mie-Ken, Japan

Aero Industries Inc.
Fort Lauderdale, FL

Aero International Helicopters
P.O. Box 17149
Nashville, TN 37217
☎615-361-0423 ☐804284
President: John Thomson
Vice President: Michael T. Thornton
Chief Pilot: Robert W. McMullan
Operations: Air taxi/charter (US part 135),
Bank paper transportation, Electronic news gathering,
Executive transport, Law enforcement (for hire),
Patrol (power, pipeline, buried cable), photography,
Pilot training school, Sightseeing, Traffic surveillance
Helicopters: **1**-500D,**2**-R22,**2**-206B

Aero Rotors
Van Wert, OH

Aero Service SC
Buenos Aires, Argentina

***Aero Support, Inc.**
P.O. Box 211
Bedford, NH 03102
☎603-644-3003
President: Gary W. York
Chief Pilot/Director of Operations: Jay Chandler
Operations: Air taxi/charter (US part 135),
Bank paper transportation, Construction,
Executive transport,
Patrol (power, pipeline, buried cable), Photography
Pilot training school, Sightseeing, Skiing
Helicopters: **1**-206B

Aero Support P/L
Hangar 271
Bankstown Airport
Bankstown NSW 2200, Australia
☎02-700-616 ☐AA 70245
Managing Director: Maxwell B. Mann
Director: Herbert D. Ray
Chief Pilot: Sam Houston
Engineer: Peter Boyle
Operations: Agriculture, Air carrier (US part 127),
Air taxi/charter (US part 135),
Commuter air carrier (scheduled),
Executive transport, Exploration, External cargo,
Fire control/support, Government contracting,
Patrol (power, pipeline, buried cable),
Photography, Repair station (FAA certified), Sightseeing
Helicopters: **2**-206B,**3**-47GB

Aero Technicians Inc.
Rexburg, ID

Aero-Copters Inc.
8013 Perimeter Road South
Seattle, WA 98108
☎206-763-2177
President: G.C. Garbell
Vice President: B.J. Garbell
Chief Pilot: L.S. Stickney
Operations: Air taxi/charter (US part 135),
Government contracting, Fire control/support,
Photography, Exploration, EMS/air ambulance,
Executive transport, External cargo, Forestry,
general, Patrol (power, pipeline, buried cable),
Repair station (FAA certified), Sightseeing, Skiing
Helicopters: **3**-206B

Aero-Dienst GmbH
Nuremberg, West Germany

Aeroexpreso Bogota Ltda.
Apartado Aereo 6781
Bogota, Colombia
☎2118100 ☐044581
President: James G. Leaver
General Manager: Roberto Nino
Technical Director: Gustavo Nivia
Operations Director: Carlos Ayala
Operations: Air taxi/charter (US part 135),
EMS/air ambulance, Executive transport,
Exploration, External cargo, Government contracting,
Patrol (power, pipeline, buried cable),
Pilot training school, Traffic surveillance
Helicopters: **6**-500D,**1**-500E

Aerogulf Services Co
Dubai, United Arab Emirates

Aerohead Helicopters, Inc.
Rialto, CA

Aeroimport
Asuncion, Paraguay

Aeroleo Taxi Aereo Ltda
Rio de Janeiro, Brazil

Aeronaut Services
Anchorage, AK

Aeronautica Alfa Beta, SA. de C.V.
Pachuca, Hidalgo, Mexico

Aeropycsa, S.A. de C.V.
Bosque de Ciruelas 304, Piso 7
Mexico D.F., 01700, Mexico
☎596-09-55 ☐1775712
President: Miguel A. Dominguez
Operations Manager: Heriberto Guevara
Operations: Air taxi/charter (US part 135),
Executive transport, Photography
Helicopters: **1**-B412

* Indicates that complete membership application has been received and is now being processed in accordance with official HAI Bylaws.

Aeroservicios Especializados
San Nicolas de la Garza, Mexico

Aerosport Federal S.A.
Orange, CA

Aerostat, Inc.
Leesburg, FL

Aerotaxis del Istmo S.A.
Puebla, Mexico

Aerotech
Colusa, CA

Aerotecnica, S.A.
Caracas, Venezuela

AEtna Life & Casualty
Hangar 85-176
Bradley International Airport
Windsor Locks, CT 06096
☎203-627-9364 ☐99241
Manager Corporate Aviation: James N. Montstream
Chief Pilot: William W. Faulkner
Operations: Corporate (US part 91, not for hire)
Helicopters: **2**-S76A

Africair, Inc.
P.O. Box 165139
Miami, FL 33116-5139
☎305-255-6973 ☐803518
President: Marvin L. Evans
Vice President: T.P. Perna
Director of Operations: Franz Astner
Operations: Exploration, External cargo, Offshore
Helicopters: **5**-206B,**5**-206L

Ag Air Inc.
P.O. Box 190
Johnstown, CO 80534
☎303-776-8944
President: Gary M. Osborne
Operations Manager: Ron L. Osborne
Operations: Agriculture, External cargo
Helicopters: **1-12ET,1-500C**

Ag Rotors Inc.
P.O. Box 578
Gettysburg, PA 17325
☎717-334-6777
President: Timothy H. Voss
V.P. Sales/Marketing: Edward Cunningham
V.P. Maintenance: Larry Helwig
Operations: Agriculture, Air taxi/charter (US part 135),
Construction, Executive transport, External cargo,
Fire control/support, Forestry, general,
Patrol (power, pipeline, buried cable),
Pilot training school, Repair station (FAA certified)
Helicopters: **4**-206B,**2**-H12E,**8**-47B

Ag-Air, Inc.
Gilbert, LA

Ag-Roter, Inc.
Dalzell, SC

Agri-Helicopters, Inc.
Owatonna, MN

Agricair (Pvt) Ltd.
Harare, Zimbabwe

Agricolair France
Chartres, France

Agricopters Ltd.
Hants, England

Air 76 Inc.
Southfield, MI

Air Affaires EJA France
Paris, France

Air Affaires Gabon
Libreville, Gabon

Air Alma, Inc.
Alma, PQ, Canada

Air Angouleme
Angouleme, France

Air Brighton, Inc.
Lindwood, NJ

Air Continent
St. Cyr L'Ecole, France

Air Enterprises
Olathe, KS

Air Grischa Helkopter AG
Untervaz, Switzerland

Air Hanson Ltd.
Brooklands
Weybridge
Surrey, KT13 0SH, England
☎0932-57611 ☐928545
Managing Director: Patrick J.R. McHaffey
Marketing/Sales: Michael Wheatley
Financial: Bob Daws
Chief Engineer: Peter S.J. Sibley
Operations: Air taxi/charter (US part 135),
Bank paper transportation, Executive transport,
External cargo, Government contracting,
Law enforcement (for hire), Photography,
Pilot training school, Repair station (FAA certified)
Helicopters: **2**-S76A,**2**-206B,**2**-206L,
2-B222

Air Inter Ivoire
Abidjan, Ivory Coast

Air Lift Inc.
Gifu, Japan

Air Lloyd
Bonn, West Germany

Air Logistics
P.O. Box 5-C
Lafayette, LA 70505
☎318-365-6771 ☐586616
Vice President/General Manager: David O. Smith
International Operations: Hans J. Albert
Director of Operations: Allan Williams
Director of Maintenance: Gerald Freeman
Operations: Air carrier (US part 127),
Air taxi/charter (US part 135),
EMS/air ambulance, Executive transport,
Exploration, External cargo,
Mechanic training school, Offshore,
Patrol (power, pipeline, buried cable),
Pilot training school, Repair station (FAA certified)
Helicopters: **23**-S76A,**38**-206B,**35**-206L,**4**-B412,
3-205A,**13**-B212,**1**-B222,**15**-355F,**2**-214ST

Air Medical Service
Loma Linda, CA

Air Methods, Inc.
P.O. Box 4114
Englewood, CO 80112
☎303-790-0587
President: Roy L. Morgan
Chief Pilot: Kent Boyack
Director of Maintenance: David Soucie
Operations: EMS/air ambulance
Helicopters: **4**-206L

Air Promotion
Paris, France

Air Service Corporation
Honolulu, HI

Air Services (1979) Ltd.
Masterton, New Zealand

Air Services International,Inc.
7300 E. Evans Road
Scottsdale, AZ 85260-3178
☎602-948-2150 ☐668-445
President: Robert M. Wachs
Vice President: Scott S. Smith
Operations Manager: Earl L. Burhans
Chief Pilot: Don Klick
Operations: Air taxi/charter (US part 135),
Bank paper transportation, Construction,
Electronic news gathering, EMS/air ambulance,
Executive transport, Exploration,
External cargo, Fire control/support,
Forestry, general, Government contracting,
Herding (stock & wildlife),
Patrol (power, pipeline, buried cable),
Photography, Repair station (FAA certified), Sightseeing
Helicopters: **4**-B212,**11**-206L,**10**-206B,**2**-315B

Air Sources, Inc.
Van Nuys, CA

Air Switch Ltd.
Medicine Hat, AB, Canada

Air Taxi SRL
Buenos Aires, Argentina

Air Techique Maintenance
Chateau Fort, France

Air Texas Helicopter Service
Houston, TX

Air Unit
Seneffe, Belgium

Air Vendee
La Roche Sur Yon, France

Air West Virginia
Ceredo, WV

Air Zermatt AG
Zermatt, Switzerland

Air-76
Southfield, MI

Air-Glaciers SA
Sion, Switzerland

Airborne Video Systems
Van Nuys, CA

Aircare of Washington, Inc.
Everett, WA

Aircoastal Helicopters, Inc.
3359-I Belvedere Road
West Palm Beach, FL 33406
☎305-471-1218
President/Chief Pilot: Boyce D. Crowe, Jr.
Operations: Air taxi/charter (US part 135),
EMS/air ambulance, Executive transport,
Photography, Sightseeing
Helicopters: **1**-206L,**2**-206B

Manufacturer's key

HAI Code/Manufacturer	
12E4	Hiller
H12D	Hiller
H12E	Hiller
SL12	Soloy
UH12E	Soloy
R22	Robinson
F28A	Enstrom
F28C	Enstrom
F28F	Enstrom
WG30	Westland
BV44	Boeing Vertol
47B	Bell
47D	Bell
47G	Bell
47G2	Bell
47G3	Bell
47G4	Bell
47G5	Bell
47H1	Bell
47J	Bell
47J2	Bell
47J3	Bell
47K	Bell
BV47	Boeing Vertol
SL47	Soloy
S55T	Sikorsky
S58T	Sikorsky/California
S61L	Sikorsky
S61N	Sikorsky
S62	Sikorsky
S64	Sikorsky
S70C	Sikorsky
S76A	Sikorsky
S76B	Sikorsky
B105	MBB
B107	Boeing Vertol
KV107	Kawasaki
109A	Agusta
BK117	Kawasaki
BK117	MBB
204B	Bell
205A	Bell
206A	Bell
206B	Bell
206L	Bell
B212	Bell
214B	Bell
214ST	Bell
B222	Bell
B234	Boeing Vertol
269A	Hughes
280C	Enstrom
280F	Enstrom
280FX	Enstrom
300B	Hughes
300C	Hughes
313B	Aerospatiale
315B	Aerospatiale
316B	Aerospatiale
3160	Aerospatiale
318C	Aerospatiale
319B	Aerospatiale
321J	Aerospatiale
330J	Aerospatiale
330K	Aerospatiale
330L	Aerospatiale
332C	Aerospatiale
332J	Aerospatiale
332L	Aerospatiale
341G	Aerospatiale
350B	Aerospatiale
350C	Aerospatiale
350D	Aerospatiale
355E	Aerospatiale
355F	Aerospatiale
360C	Aerospatiale
361	Aerospatiale
365	Aerospatiale
365N	Aerospatiale
B412	Bell
500A	Hughes
500C	Hughes
500D	Hughes
500E	Hughes
1100	Fairchild
TCAT	Continental (Bell)
WASP	WASP

Safety
Seminar

The safe combination ...

The safe combination for helicopter operations is proper flight crew training, good operations and maintenance practices, and the HAI Safety Seminar.

Designed for mid-level management and pilots, these seminars provide a forum for problem solving. The seminar covers a wide variety of subjects that are important to safety management and accident prevention.

The safety seminars are conducted regionally, and much of the material is tailored to problems of specific interest within each region.

For more information, contact:
HAI Safety & Technical Department
1619 Duke Street
Alexandria, VA 22314-3406
Telephone: 703-683-4646. Telex: 89-615
Or return the information reply card
on page 144.

Invest in a safe combination.

Helicopter
Association
International

Aircopters of San Diego, Inc.
El Cajon, CA

Aircraft at Your Call
Portland-Hillsboro Airport
P.O. Box 849
Hillsboro, OR 97123
☎503-640-8294 ☐9104602204
President: C. Norman Winningstad
Operations Manager: Tom Hutson
Chief Pilot: Gary Ogle
Chief Helicopter Mechanic: Rob Montee
Operations: Air taxi/charter (US part 135),
Corporate (US part 91, not for hire),
EMS/air ambulance, Executive transport,
Exploration, External cargo, Forestry, general,
Government contracting, Offshore,
Patrol (power, pipeline, buried cable),
Photography, Private owners,
Repair station (FAA certified), Sightseeing
Helicopters: **2**-109A,**1**-206L

Airfast Services, P.T.
Indonesia
Jalan Riau No. 10
Jakarta, Indonesia
☎338164 ☐44497
President: Frank D. Reuneker
Director: Erlangga Suryadarma
General Manager: Terence E. Steen
Chief Pilot: Charles A. Weitz
Operations: Air taxi/charter (US part 135),
EMS/air ambulance, Construction,
Executive transport, Exploration, External cargo,
Government contracting, Logging, Offshore,
Patrol (power, pipeline, buried cable), Sightseeing
Helicopters: **8**-S58T,**4**-204B,**2**-206B,**1**-316B

Airlec-Air Aquitaine Transport
Merignac, France

Airmark Corporation
Burbank, CA

Airmetro Helicopters, Inc.
Ridgefield Park, NJ

Airspan Helicopters
Vancouver, BC, Canada

Airtransivoire
Abidjan, Ivory Coast

Airwest Helicopters Ltd.
South Island, New Zealand

Alaska Helicopters, Inc.
Box 6283-Airport Annex
Anchorage, AK 99502
☎907-243-3404 ☐25372
President: Rex I. Bishopp
Operations Manager: Steven R. Smith
Chief Pilot: Bill Woollen
Director of Maintenance: Thomas E. Craig
Operations: Air taxi/charter (US part 135),
Construction, Exploration, External cargo,
Fire control/support, Government contracting,
Logging, Offshore,
Patrol (power, pipeline, buried cable),
Repair station (FAA certified)
Helicopters: **14**-206B,**5**-206L,**2**-205A,
1-B107,**1**-B234

Albacora SA
Gran Canary Islands

Alberta West Helicopters, Ltd.
Whitecourt, AB, Canada

Albrecht Spraying Service, Inc.
North Canton, OH

Alexair
25320 Bellanca Way
Torrance, CA 90505
☎213-326-3338 ☐653582
President: Eli Alexander
Operations Manager: Steve A. Alexander
Operations: Air taxi/charter (US part 135),
EMS/air ambulance, Bank paper transportation,
Executive transport, Law enforcement (for hire),
Photography, Pilot training school,
Repair station (FAA certified),
Sightseeing, Traffic surveillance
Helicopters: **2**-500C,**1**-500D,**2**-300B

Alexandria Sheriff
Alexandria, VA

Aliserio S.p.A.
Bergamo, Italy

Allco Mechanical Corporation
Bethpage, NY

Allen County Police Dept.
Fort Wayne, IN

Allied Automotive
30000 Northline Road
Detroit, MI 48242
☎313-941-2300 ☐23-0699
President/CEO: J. Mason Reynolds
Operations Manager/Chief Pilot: Donald G. Harner
Helicopter Captain: James W. Moore
Operations: Corporate (US part 91, not for hire)
Helicopters: **1**-206B,**1**-222B

Allied Corporation
Allied Aviation Department
Morristown Airport
Morristown, NJ 07960
☎201-455-6012
Director, Aviation: G.J. DiSilvestro
Chief Pilot: Jack G. Childs
Chief of Maintenance: Jim S. Johnson
Operations: Corporate (US part 91, not for hire),
Executive transport
Helicopters: **1**-S76A

Allison/Walker Interests, Inc.
9898 Bissonet
Suite 633
Houston, TX 77036
☎713-981-9898
Director of Flight Operations: Howard D. Horton
Operations: Corporate (US part 91, not for hire)
Helicopters: **1**-206B,**1**-206L

Almaden Vineyards Inc.
1530 Blossom Hill Road
San Jose, CA 95118
☎408-269-1312 ☐357478
Treasurer: David R. Barasch
Operations Manager: Thomas J. Grady
Chief Pilot: Joseph B. Shipley
Operations: Corporate (US part 91, not for hire)
Helicopters: **1**-206B

Alpine Enterprises Ltd.
Hoditika, New Zealand

Alpine Helicopters Ltd.
Queenstown Airport
2 Road
Queenstown, New Zealand
☎Q-820 ☐N2 5710
Managing Director: Donald Spary
Chief Pilot: Bill Black
Chief Engineer: Don McInnes
Stores Manager: Kerry Williams
Operations: Agriculture, Air taxi/charter (US part 135),
Construction, Exploration, External cargo,
Forestry, general, Herding (stock & wildlife),
Photography, Sightseeing, Skiing
Helicopters: **1**-350B,**6**-206B,**3**-500D,**6**-500C

Alpine Helicopters, Inc.
Evergreen, CO

Alpine Helicopters, Ltd.
Kelowna, BC, Canada

Alpine Helicopters, Ltd.
Calgary, AB, Canada

Altro Helicopters Ltd.
Red Deer, AB, Canada

Aly Aviation Ltd
Somerset, England

Ambroy Equipment Ltd.
Fraser Lake, BC, Canada

American Express Company
Hangar "E"
Westchester County Airport
White Plains, NY 10604
☎914-948-5311
Chief Pilot: Kenneth Wallace
Chief of Maintenance: Thomas Fleming
Senior Helicopter Captain: Ronald C. Lombardo
Helicopter Captain: Ronald E. Becker
Helicopter Captain: Chauncey Webb
Operations: Corporate (US part 91, not for hire)
Helicopters: **1**-S76A

American Helicopters Corp.
7201 Perimeter Road
Boeing Field
Seattle, WA 98108
☎206-763-4237
President: Richard A. Dominy
Operations: Air taxi/charter (US part 135),
EMS/air ambulance, Bank paper transportation,
Construction, Executive transport,
External cargo, Exploration, Electronic news gathering,
Government contracting, Offshore, Photography,
Pollution detection/monitoring, Sightseeing, Skiing
Helicopters: **2**-350D

American Helicopters, Inc.
San Angelo, TX

American Helicopters, Inc.
Cincinnati, OH

American Protective Services, Inc.
550 Second Street, INEL
Idaho Falls, ID 83401
☎208-526-2078
President, APS: Tom Keating
Project Manager, APS: John Maloney
Air Operations Manager: Dennis W. Bash, Sr.
Asst. Manager-Admin.-DOE: Stu Milam
Director, Safeguard & Security: Bob Bostian
Operations: Government agency (not for hire),
Law enforcement (not for hire)
Helicopters: **2**-222UT

Amway Corporation
Amway Corporation Hangar
5410 44 Street S.E.
Grand Rapids, MI 49508
☎616-949-0790 ☐8102736912
Director of Aviation: Donald G. Reininger
Operations: Corporate (US part 91, not for hire)
Helicopters: **1**-S76A,**1**-206L

Analar Corp./Church & Dwight Co., Inc.
P.O. Box 3302
469 Harrison Street
Princeton, NJ 08540
☎201-885-1069
President: Duncan D. Dwight
Operations Manager: Willard C. Kimm, Jr.
Operations: Air taxi/charter (US part 135),
Bank paper transportation,
Corporate (US part 91, not for hire),
Executive transport,
Patrol (power, pipeline, buried cable),
Photography, Sightseeing, Traffic surveillance
Helicopters: **1**-206B

Anderson Helicopters
Victoria, Australia

Anheuser-Busch Companies, Inc.
Flight Operations
P.O. Box 826
Bridgeton, MO 63044
☎314-427-2201 ☐9107650915
Manager of Flight Operations: Carl E. Henke
Operations: Corporate (US part 91, not for hire)
Helicopters: **1**-B222

Ansett Airlines Of Australia
Victoria, Australia

Apex Helicopters, Ltd.
Saskatoon, SK, Canada

Appalachian Flying Service, Inc.
Blountville, TN

Appalachian Tire Company
Charleston, WV

Arabian Helicopters Ltd.
P.O. Box 619
Dhahran Airport 31932, Saudi Arabia
☎898-0028 ☐670724
President: William J. Maddox
Operations Manager: Alvin M. Poore
Chief Pilot: Neil E. Elliott
Maintenance Superintendent: Robert Grogan
Operations: Air taxi/charter (US part 135),
Executive transport, External cargo, Offshore,
Patrol (power, pipeline, buried cable),
Photography, Pollution detection/monitoring,
Repair station (FAA certified)
Helicopters: **2**-214S,**6**-212B,**12**-206B

Arabian Helicopters Ltd.
Montgomery, AL

Archway Aviation, Inc.
St. Louis, MO

Arctic Air Service, Inc.
Lompoc, CA

Arctic Air Service, Inc.
1801 A North "H" Street
Lompoc, CA 93436-2827
☎805-735-3717
President: Walter N. Attebery
Director of Operations: Richard Wallace
Chief Pilot: James O. Wisecup
Director of Maintenance: Robert Maunder
Operations: Construction, EMS/air ambulance,
Exploration, External cargo,
Government contracting,Offshore
Helicopters: **1**-S76A,**1**-206B

Aris Helicopters, Ltd.
1138 Coleman Avenue
San Jose, CA 95110
☎408-998-3266
President: Stephen R. Sullivan
Secretary/Treasurer: Nancy R. Sullivan
Chief Pilot: Jonathon J. Long
Chief Flight Instructor: Donovan V. Mott
Operations. Air taxi/charter (US part 135),
Construction, Executive transport,
Exploration, External cargo, Fire control/support,
Patrol (power, pipeline, buried cable),
Photography, Pilot training school,
Repair station (FAA certified)
Helicopters: **4**-300C,**2**-500D,**1**-206B,
3-350D,**1**-S58T

Arizona Department of Public Safety
Air Rescue Section
P.O Box 6638
Phoenix, AZ 85005
☎602-262-8413
Commander, Aviation Division: Frank S. Root
Commander, Air Rescue Section: William D. Saulter
Training/Safety Pilot: W.W. Moore
Accident Investigation: Sgt. E.J. Slechta
Operations: EMS/air ambulance, Law enforcement
(not for hire)
Helicopters: **2**-206B,**2**-206L

Arizona Hover Services
Scottsdale, AZ

Arizona Jet, Inc.
Phoenix, AZ

Arizona Medical Transport
Phoenix, AZ

Arizona Public Service Co.
P.O. Box 21666
Station 3350
Phoenix, AZ 85036
☎602-271-7908
President: Mark DeMichele
Supervisor, Transportation: Keith Hollingsworth
Chief Pilot: Ron Wallace
Helicopter Pilot: Mel Hoffman
Operations: Corporate (US part 91, not for hire),
Executive transport, External cargo,
Patrol (power, pipeline, buried cable)
Helicopters: **1**-355F

Arkair
Stockholm, Sweden

Arkansas State Police
Little Rock, AR

Armadillo Airways Helicopters
9801 Westheimer
Suite 808
Houston, TX 77042
☎800-231-4141 ☐790386
President: Buck Ballas
Director of Operations: Wayne Brown
Director of Maintenance: Duane Beland
Operations: Air taxi/charter (US part 135),
Commuter air carrier (scheduled),
Repair station (FAA certified),
Executive transport, Photography,
Repair station (FAA certified), Sightseeing
Helicopters: **3**-206B

Arnold Semler Division
North Hollywood, CA

Arrowhead Helicopters, Inc.
Colquet, MN

Arrowhead Helicopters, Inc.
Kingman, AZ

Jack Ashworth Ltd.
Matamata, New Zealand

Operators
Management
Seminar

Compliments to the management

Complement your industry experience with the new skills and knowledge gained at an HAI management seminar.

Broadly based work-study seminars provide helicopter managers with applied and practical skills in creative marketing, strategic planning for profit, improved operations management, enhanced operator economics, innovative financing, money management and micro computer use by managers.

Hundreds of managers, operators and owners have benefited from this program.

The Operators Management Seminar is held annually, just before the HAI Annual Meeting. The International Management Course — a second option — is conducted annually outside of the U.S.A.

For more information on HAI management seminars, write or call:
HAI Safety & Technical Department
1619 Duke Street
Alexandria, VA 22314-3406
Telephone: 703-683-4646. Telex: 89-615
Or return the information reply card on page 144.

Compliment your management.

Helicopter
Association
International

Asia Aero Survey
Seoul, Korea

Asian Aviation Services, Inc.
Bedford, TX

Aspen Helicopters Inc.
2834 Teal Club Road
Oxnard, CA 93030
☎805-985-5416
Chief Executive Officer: Phyllis J. Throckmorton
Operations: Air taxi/charter (US part 135),
Government contracting, Offshore, Construction,
Corporate (US part 91, not for hire),
Electronic news gathering,
Executive transport, Exploration,
External cargo, Fire control/support,
Forestry, general, Herding (stock & wildlife),
Law enforcement (for hire),
Patrol (power, pipeline, buried cable),
Photography, Pilot training school,
Pollution detection/monitoring,
Repair station (FAA certified)
Helicopters: 6-206B,1-206L,2-500D

Associated Drilling, Inc.
Johnstown, PA

Associated Helicopter Services, Inc.
2600 E. Wardlow Road
Long Beach, CA 90807
☎213-492-1098
President: Les G. Smith
V.P./Director of Operations: Clifford T. Fleming
Operations: Air taxi/charter (US part 135),
Construction, Executive transport, Exploration,
External cargo, Fire control/support,
Government contracting, Offshore,
Patrol (power, pipeline, buried cable),
Photography, Sightseeing, Skiing
Helicopters: 1-206L,2-204B,1-205A,
1-B222,1-350D,1-500D,1-315B

Associated Sprayers, Inc.
Premont, TX

Asteroid Helicopter Corp.
Western Springs, IL

Astra Helicopters (PTY.) Ltd.
Johannesberg, South Africa

Astro Helicopters Ltd.
Te Awamutu, New Zealand

Astrocopters, Ltd.
Oakland, CA

Athabaska Airways Ltd.
Saskatchewan, Canada

Atlanta Executive Helicopter
Atlanta, GA

Atlanta Police Department
Atlanta, GA

Atlantic Air, Ltd.
Norfolk, VA

Atlantic Airlines, Inc.
Palm Beach, FL

Atlantic Helicopter Service
P.O. Box 384
Palm Beach, FL 33480
☎305-659-3711
Partner: George G. Matthews
Operations: Corporate (US part 91, not for hire),
Photography
Helicopters: 1-206B

Atlantic Helicopters, Inc.
Barnegat, NJ

***Aurora Helicopters, Inc.**
P.O. Box 29
Willow, AK 99688
☎907-495-6306
President: Harry M. Craviotto
Chief Pilot: Mose Car
Operations: Agriculture, Air taxie/charter (US part 135),
Exploration, External cargo, Government contracting,
Law enforcement/for hire,
Patrol (power, pipeline, buried cable), Sightseeing
Helicopters: 1-206B

Austin Business Jets
Austin, TX

Austin Helicopter Service Inc.
10006 Baxter Lane
Austin, TX 78736
☎512-476-7565
President: Jerry D. Angerman
Operations: Air taxi/charter (US part 135),
Bank paper transportation, Executive transport,
Patrol (power, pipeline, buried cable),
Photography, Sightseeing, Traffic surveillance,
Electronic news gathering
Helicopters: 1-206B

Autair Helicopteros SRL
Buenos Aires, Argentina

Autair Helicopters (Africa) Ltd.
Lusaka, Zambia

Autair Helicopters (EA) Ltd.
P.O. Box 41951
Nairobi, Kenya
☎501658 ☐22512
President: F.W. Wilcox
V.P. Sales/Marketing: L.O. Svensson
V.P. Public Relations: T.S. Ward-Booth
Chief Engineer: E.F. Kibirige
Operations: Agriculture, Construction,
EMS/air ambulance, Executive transport,
Exploration, External cargo, Government contracting,
Herding (stock & wildlife),
Patrol (power, pipeline, buried cable), Photography
Helicopters: 5-206B,1-47G3

Autair International Ltd.
Beds, England

Auto-Meyer KG
Bielefeld, West Germany

Auxair
Lyon-Statolas Ap, France

Avant Aire, Ltd.
Honolulu, HI

Avia AB
Visby, Sweden

Avialpi S.r.L.
Bolzano, Italy

Aviation Development (Pty.) Ltd.
Port Moresby, New Guinea

Aviation Maintenance
Seattle, WA

Aviation Services Corporation
Nashville, TN

Aviation Services Unlimited
Rural Route 1; Box 46
Hinman Road
Barneveld, NY 13304
☎315-896-2076
President: Lothar G. Stahlberg
Operations Manager: Harold T. Lennon, Jr.
Operations: Air taxi/charter (US part 135),
Bank paper transportation, Construction,
Executive transport, Exploration,
Fire control/support, Forestry, general,
Government contracting, Law enforcement (for hire),
Patrol (power, pipeline, buried cable),
Photography, Pollution detection/monitoring,
Sightseeing, Skiing, Traffic surveillance
Helicopters: 1-206B,1-47D1,1-B47G

Aviation Training Academy
Sterling Junction, MA

Aviation USA
Tuscaloosa, AL

Avicopter S.A.
Gran Canary Islands,

Aviex Jet
Houston, TX

Aviofer Breda S.p.A.
Rome, Italy

Avionic Co.
Athens, Greece

B & B Aviation, Inc.
Tomball, TX

B & C Flying Service
Harrisburg, AR

B & G Helicopter Corp.
4150 Broadmoor Avenue, S.E.
Grand Rapids, MI 49508
☎616-698-9050 ☐234133
President: Paul E. Geddes
Operations Manager: Frank Schultz
Director of Marketing: Jeffrey Heritage
Chief Pilot: Ernie Eadelman
Operations: Air taxi/charter (US part 135),
Construction, Executive transport, External cargo,
Patrol (power, pipeline, buried cable),
Photography, Repair station (FAA certified),
Sightseeing, Traffic surveillance
Helicopters: 1-206B,1-206L,2-S58T,1-269C,
2-F28C,1-214B

B & J Helicopter Service, Inc.
Mount Sterling, OH

B & J Helicopters
Alcoa, TN

B & K Helicopter
Forks, WA

B & W Aviaton
Shafter, CA

B.C. Helicopters
Annapolis, MD

Bahl Helistop, Inc.
Fredericktown, OH

Baker Aerial Spraying
Kilbourne, IL

Balboa Pacific Helicopters
P.O. Box 468
Great Neck, NY 11022
☎212-357-5300 ☐645553
Chairman: Luis Silva de Balboa
Vice President, Operations: Edward A. Jaeggi
Vice President, International: Andrew Hodes
Vice President, Marketing: Allan McIntosh
Operations: Executive transport, Offshore,
Private owners
Helicopters: 1-S76A,1-B222

Baltimore City Police Department
Baltimore, MD

Baltimore Gas & Electric Co.
P.O. Box 1475
Baltimore, MD 21203
☎301-234-5000 ☐7102341670
Manager - Transportation: R. C. Dernoga
Operations: Corporate (US part 91, not for hire),
Executive transport,
Patrol (power, pipeline, buried cable), Photography
Helicopters: 1-206B

Bandas Helo, Inc.
Temple, TX

Banff Mountain Heliports
Banff, AB, Canada

Baron Aviation, Inc.
Richmond Heights, OH

Barr Bros. Ltd.
Papakura, Auckland, New Zealand

Bat Bodmer Air Taxi Ltd.
Zurich, Switzerland

Bay Colony Helicopters, Inc.
Plymouth, MA

Bay Helicopters, Inc.
Panama City, FL

Bay Port Aviation, Inc.
Laporte, TX

Beach Helicopters, Inc.
Loveladies, NJ

Beartooth Helicopters
Billings, MT

BeauDril Ltd.
Tuktayaktuk, NT, Canada

Beck Helicopters Ltd.
Eltham, New Zealand

Beckers Flying Service
Hartington, NE

Bedford Helicopters
Bedford, VA

Bee-Air Oy
Helsinki, Finland

* Indicates that complete membership application has been received and is now being processed in accordance with official HAI Bylaws.

Beechwoods Flying Service Inc.
R.D. No. 2 — Box 90B
Reynoldsville, PA 15851-9802
☎814-375-0150
President: Robert G. Spencer
Chief Pilot, Rotary Wing: J. Wade
Fixed Wing: S. Valin
Operations: Air taxi/charter (US part 135),
EMS/air ambulance, Executive transport,
Forestry, general, Government contracting,
Patrol (power, pipeline, buried cable), Photography,
Repair station (FAA certified),Sightseeing
Helicopters: **3**-206B,**1**-206L

Beijing Book Co.
Linden, NJ

Bell Helicopter Australia
P.O. Box 18
Brisbane Airport
Queensland 4007, Australia
☎07-268-4077 ☐40397
Managing Director: Joseph V. Moharich
Operations: Repair station (FAA certified)
Helicopters: **1**-206L

Bellaire Helicopters, Inc.
Belleglade, FL

Bemer Aviation Inc.
Glatonbury, CT

Benair
Montgomery, AL

Bennett Lumber Products, Inc.
Princeton, ID

Benson Flying Service, Inc.
Benson, MN

***Benz Sales Company**
8900 Trinity Blvd.
Hurst, TX 76053
☎817-282-1212 ☐758-504
President: Roy H. Coleman
Vice President: Blair Carlson
Marketing Director: Glenda Goebel
Vice President-General Manager: Jack Bell
Operations: Construction, Private owners
Helicopters: **1**-47G

Bergqvist Helicopter Service
Ringsted, Denmark

Berner-Oberlander Helikopter AG
Gsteigwiler, Switzerland

Bertea/Aviation Inc.
P.O. Box 606
Corvallis, OR 97339-0606
☎503-753-4466 ☐51059060687
President: Jeanette B. Hennings
Vice President: Richard Bertea
General Manager: Edward W. Hennings
Operations: Agriculture, Air taxi/charter (US part 135),
Construction, Electronic news gathering, Exploration,
External cargo, Fire control/support,
Forestry, general, Government contracting,
Herding (stock & wildlife), Logging,
Patrol (power, pipeline, buried cable),
Photography, Pilot training school,
Pollution detection/monitoring,
Repair station (FAA certified), Sightseeing,
Traffic surveillance
Helicopters: **1**-500E,**2**-500D,**1**-H12E,**1**-SL12

Beta Air
La Mesa, CA

Bettencourt Flying Service, Inc.
Delhi, CA

Bharatair
Calcutta, India

Bi-State Helicopters, Inc.
Covington, IN

Big Eye Helicopters
Terminal Island, CA

Big Horn Airways, Inc.
Sheridan, WY

Big Sky Wing & Rotor, Inc.
Havre, MT

Big Twirl, Inc.
Fort Lauderdale, FL

Big Valley Aviation Inc.
1794 Lindbergh Street
Stockton, CA 95206
☎209-982-4991 ☐5107655162
Secretary/Treasurer: Ray Etcheverry
Operations: Repair station (FAA certified)
Helicopters: **1**-47G3,**2**-206B,**3**-H12E

Bill Klutts Helicopter Service
Copan, OK

Bird Space Technology
P.O. Box 817
Sandpoint, ID 83864
☎208-263-2549
President: Forrest M. Bird
Operations: EMS/air ambulance
Helicopters: **1**-47G3,**1**-206B,**1**-B212

Birmingham Police Department
Birmingham, AL

Black Beauty Coal Company, Inc.
P.O.Box 312
Evansville, IN 47702
☎812-424-9000
Chief Pilot: Lou Buck
Operations: Corporate (US part 91, not for hire)
Helicopters: **1**-500D

Black Mountain, Inc.
Manila, Philippines

Blackhawk Helicopter Services, Inc.
4677 Kennedy Road
Cottage Grove, WI 53527
☎608-839-4503
President: Edward Morgan
Director of Maintenance: Richard Mowris
Manager: Deborah K. Nightingale
Operations: Agriculture,
Air taxi/charter (US part 135),
External cargo, Fire control/support,
Forestry, general, Government contracting,
Patrol (power, pipeline, buried cable),
Photography, Pilot training school
Helicopters: **1**-206B,**1**-F28A

Blackhawk Helicopters, Inc.
P.O. Box 1412
Provo, UT 84603
☎801-375-9218
President: Loran E. Patterson
Operations: Air taxi/charter (US part 135),
Construction, EMS/air ambulance,
Executive transport, Exploration,
External cargo, Fire control/support,
Forestry, general, Herding (stock & wildlife),
Patrol (power, pipeline, buried cable), Photography
Helicopters: **4**-315B,**1**-316B

Blain Helicopter
Billings, MT

Blakes Helicopter Service
8100 Pleasants Valley Road
Vacaville, CA 95688
☎707-448-7278
President/Owner: William K. Blake
Operations: Construction, Exploration,
External cargo, Forestry, general,
Herding (stock & wildlife),
Patrol (power, pipeline, buried cable),
Photography, Private owners, Sightseeing
Helicopters: **1**-47G2

Bluefield Aviation, Inc.
Bluefield, VA

Board of Civil Aviation
Flight Safety Dept.
Norrkoping, S 601 79, Sweden
☎011-192000 ☐64250
Flight Inspector: Ragnar Boge
Operations: Government agency (not for hire)

Boardwalk Helicopters
Atlantic City, NJ

Bohemia Inc.
90692 Greenhill Road
Eugene, OR 97402
☎503-688-6777 ☐364442
President: S.E. Pittman
Chief Pilot: Joe Murphy
Operations: Air taxi/charter (US part 135),
EMS/air ambulance, Executive transport,
External cargo, Fire control/support,
Forestry, general, Photography
Helicopters: **1**-341G

Bohn Helicopters, Inc.
Monroe, LA

Boise Cascade Corporation
Boise, ID

Bond Helicopters Limited
Cambridge, England

Booren Helicopter Operators
Queensland, Australia

Boston Air Taxi
Beverly, MA

Bouquemont/SICAMA
Vertus, France

Bradair, Inc.
Pearland, TX

Brainard Helicopter Service
Brainard, MN

D.H. Braman Company
400 Victoria Bank & Trust
Victoria, TX 77901
☎512-578-6271
President: D.H. Braman, Jr.
Senior Pilot/Mechanic: Ambrose A. Connelly, Jr.
Operations: Corporate (US Part 91, not for hire),
Executive Transport, Herding (stock & wildlife),
Law Enforcement (not for hire),
Patrol (power, pipeline, buried cable), Private Owners
Helicopters: **2**-S76A,**2**-SL47

Gene Branscome Investments
P.O. Box 1276
Baytown, TX 77520
☎713-420-5777
Chief Pilot: R.J. (Ric) Forns
Operations: Construction Corporate:
(US Part 91, not for hire),
Executive Transport, Herding (stock & wildlife),
Photography,
Helicopters: **1**-206L

Brentner Aircraft, Inc.
Marion, IA

Brevard County Sheriffs Office
Titusville, FL

Bridge Helicopters Ltd.
Spalding Lines, England

Bright Flying Service
Manila, AR

Briles Wing & Helicopter, Inc.
16592 Arminta Avenue
Van Nuys, CA 91406
☎818-994-1445 ☐66290[illegible]
President: Paul Briles
General Manager: Greg W. Briles
Ass't. General Manager: Mike Guest
Director of Operations: John Sarviss
Chief Pilot: William Irby
Operations: Air taxi/charter (US part 135),
EMS/air ambulance, Bank paper transportation,
Construction, Electronic news gathering,
Executive transport, Exploration,
External cargo, Fire control/support,
Forestry, general, Government contracting,
Herding (stock & wildlife), Offshore,
Patrol (power, pipeline, buried cable),
Photography, Pollution detection/monitoring,
Sightseeing, Skiing, Traffic surveillance
Helicopters: **5**-206B,**5**-206L,**4**-S58T

Bristow Caribbean Ltd.
Port-of-Spain, Trinidad

Bristow Helicopter Group Ltd.
Redhill Aerodrome
Redhill
Surrey RH1 5JZ, England
☎01-668-6352 ☐21913
Chairman: Alan E. Bristow
Director of Operations: A. C. Gordon
Operations: Agriculture, Air taxi/charter (US part 135),
Commuter air carrier (scheduled),
Construction, Executive transport,
Exploration, External cargo, Government contracting,
Mechanic training school, Offshore,
Patrol (power, pipeline, buried cable),
Photography, Pilot training school,
Repair station (FAA certified)
Helicopters: **28**-S61N,**23**-332L,**11**-330J,
30-B212,**14**-105D,**14**-S76A,**11**-205A,**3**-316B

Bristow Helicopters
Paya Lebar, Singapore

Bristow Helicopters (Int'l.) Ltd
Cairo, Egypt

Bristow Helicopters (Nigeria)
Lagos, Nigeria

Bristow Helicopters Ltd.
Dubai, United Arab Emirates

Bristow Helicopters Malaysia
Kuala Lumpur, Malaysia

Bristow Masayu Helicopters P.T.
Jakarta, Indonesia

British Airways Helicopters
Howe Moss Drive
Kirkhill Industrial State
Dyce, Aberdeen AB2 0DU, Scotland
☎0224-771662 ☐73615
Managing Director: Michael Cloete-Graham
Commercial Director: Keith Bolshaw
Flight Operations Director: Stewart Birt
Engineering Director: Muir Parker
Air Safety Officer: T. Jenkins
Operations Director: Tom Porteous
Operations: Air carrier (US part 127),
Air taxi/charter (US part 135),
Commuter air carrier (scheduled),
Construction, External cargo, Offshore,
Pilot training school
Helicopters: **4**-B234,**17**-S61N,**4**-S76A,
3-332L,**3**-WG30

British Caledonian Helicopters Ltd.
Dyce, Aberdeen, Scotland

British Holdings Air Division
Richmond, BC, Canada

Broomes Helicopter Service Inc.
Sale City, GA

Brunei Shell Petroleum Co. Ltd.
Seria, Brunei

Buckeye Helicopter Services
Sunbury, OH

Bucks County Helicopter
Langhorne, PA

Buffalo Airways Ltd.
Fort Smith, NT, Canada

George Bumb Helicopter
San Jose, CA

Burnett Aviation Co., Inc.
Fort Worth, TX

Burnside-Ott Aviation
Miami, FL

Burnthiils Aviation Ltd./
Renfrews, Scotland

Business Helicopters Inc.
P.O. Box 5356
Manchester, NH 03108
☎603-668-4665
President: Robert C. McCray
Chief Pilot: LaRay Todd
Operations Manager: William Quinn
Operations: Air taxi/charter (US part 135),
Corporate (US part 91, not for hire),
Electronic news gathering,
Executive transport, Photography,
Private owners, Sightseeing, Traffic surveillance
Helicopters: **1**-206B,**1**-206L

Byron AG Aviation Inc.
Attica, OH

C & C Flying Service Inc.
Valdosta, FL

C & P Airways, Inc.
Rural Retreat, VA

C & W Ag-Air Service
Hanson, MA

C.B.S. Inc.
Westchester County Airport
Hangar A
White Plains, NY 10604
☎914-428-5152
President: Thomas Wyman
Operations Manager: John Petri
Operations: Executive transport
Helicopters: **1**-S76A

C.D.C.P.
Manila, Philippines

C.I.T. Corporation
Livingston, NJ

C.Q. Air
Garrett Park, MD

C.R. Corporation
Manila, Philippines

C.R.I.
20881 Cerritos Avenue
Apple Valley, CA 92307
☎619-247-5845
President: Chet Rasberry
Maintenance Supervisor: William E. Poole
Operations: Agriculture,
Air taxi/charter (US part 135),
EMS/air ambulance, Construction, Exploration,
External cargo, Fire control/support,
Forestry, general, Government contracting,
Herding (stock & wildlife), Offshore,
Patrol (power, pipeline, buried cable),
Photography, Pilot training school, Skiing
Helicopters: **2**-500D,**2**-206B

CB Helicopters Ltd.
London, England

CIGNA Corporation
Hangar 85-176
Bradley International Airport
Windsor Locks, CT 06096
☎203-726-4459
Director/Corporate Aviation: H. W. Parrish
Operations: Corporate (US part 91, not for hire),
Executive transport
Helicopters: **2**-S76A

CSE Aviation Limited
Kidlington, Oxford, England

CSX Beckett Aviation, Inc.
P.O. Box 81040 - AMF
Cleveland, OH 44181
☎216-826-9200 ☐241583
President, Kenneth L. Masters
Senior V.P., Flight Mgmt.: William H. Hamill
Director, Flight Operations: D. L. Minner
Operations: Air taxi/charter (US part 135),
Corporate (US part 91, not for hire)
Helicopters: **1**-109A

Cabair Ltd.
Herts, England

Caesars Atlantic City
P.O. Box 7584
Trenton, NJ 08628-0584
☎609-771-8071
Chief Pilot: Robert Doyle
Chief of Maintenance: Don Custer
Senior Captain: Edward Ferguson
Operations: Corporate (US part 91, not for hire)
Helicopters: **2**-S76A

Cal-Sierra Timber, Inc.
Nevada City, CA

Cal-West Helicopter Service
Van Nuys, CA

Caledon Helicopters Limited
Caledon, ON, Canada

Calicopters, Inc.
Stockton, CA

California Agricultural Sprayers Inc.
Delano, CA

***California Department of Forestry**
1416 Ninth Street
Sacramento, CA 95814
☎916-324-9689
Senior Air Operations Officer: C. W. (Cotton) Mason
Helicopter Program Manager: Olis H. Kendrick
Lead Helicopter Pilot: Cecil Gill
Operations: Fire control/support, Forestry/general,
Government agency/not for hire
Helicopters: **9**-UH1F

California Department of Justice
Fresno, CA

California Federal Savings
5670 Wilshire Boulevard #2580
Los Angeles, CA 90036
☎213-932-4661
Chief Pilot: Steve Sirk
Pilot: Steve Hopp
Operations: Corporate (US part 91, not for hire)
Helicopters: **1**-206L

California Helicopter Airways, Inc.
Hayward, CA

California Helicopter Corp.
El Cajon, CA

Caliop
Montmorency, France

Camden County Sheriff
Woodbine, GA

Camelot Aviation
Burlington, ON, Canada

Can-Du Air Ltd.
Saint Thomas, ON, Canada

Cane Air Inc.
Belle Rose, LA

Canelands Helicopters Svcs Pty
Bundberg, Queensland, Australia

Canwest Aviation Ltd.
Okotoks, AB, Canada

Capital Helicopters Ltd.
Wellington, New Zealand

Capitol Aviation & Helicopter Services
Rancho Cordova, CA

Cardinal Air Services Inc.
Fountain Valley, CA

Carey Construction Company
Boring, OR

William K. Carpenter
Atrium Financial Plaza
Suite 202
1515 N. Federal Highway
Boca Raton, FL 33432
☎305-368-0629
Owner: William K. Carpenter
Operations: Private owners
Helicopters: **1**-206B

Carr Aviation, Inc.
Pasco, WA

Carraway Methodist Medical Ctr
Birmingham, AL

Carson Helicopters, Inc.
Perkasie, PA

Cascade Helicopters, Inc.
407 N. Division
P.O. Box 596
Cashmere, WA 98815
☎509-782-2915
President: Fred C. Scaman
Vice President: William H. Wells
Operations Manager: Effie Alvarez
Chief Pilot: William H. Wells, Jr.
Secretary/Treasurer: James F. Ripley
Operations: Agriculture, Air taxi/charter (US part 135)
EMS/air ambulance, Construction,
Executive transport, Exploration,
External cargo, Fire control/support,
Forestry, general, Government contracting,
Herding (stock & wildlife), Photography,
Repair station (FAA certified), Sightseeing, Skiing
Helicopters: **1**-315B,**1**-350D,**3**-206B,
2-47G3,**2**-SL47

Cascade Rotors Ltd.
High River, AB, Canada

Casper Air Service
Casper, WY

Castle Air Charters Ltd.
Cornwall, England

Catouch Helicopter
Medaryville, IN

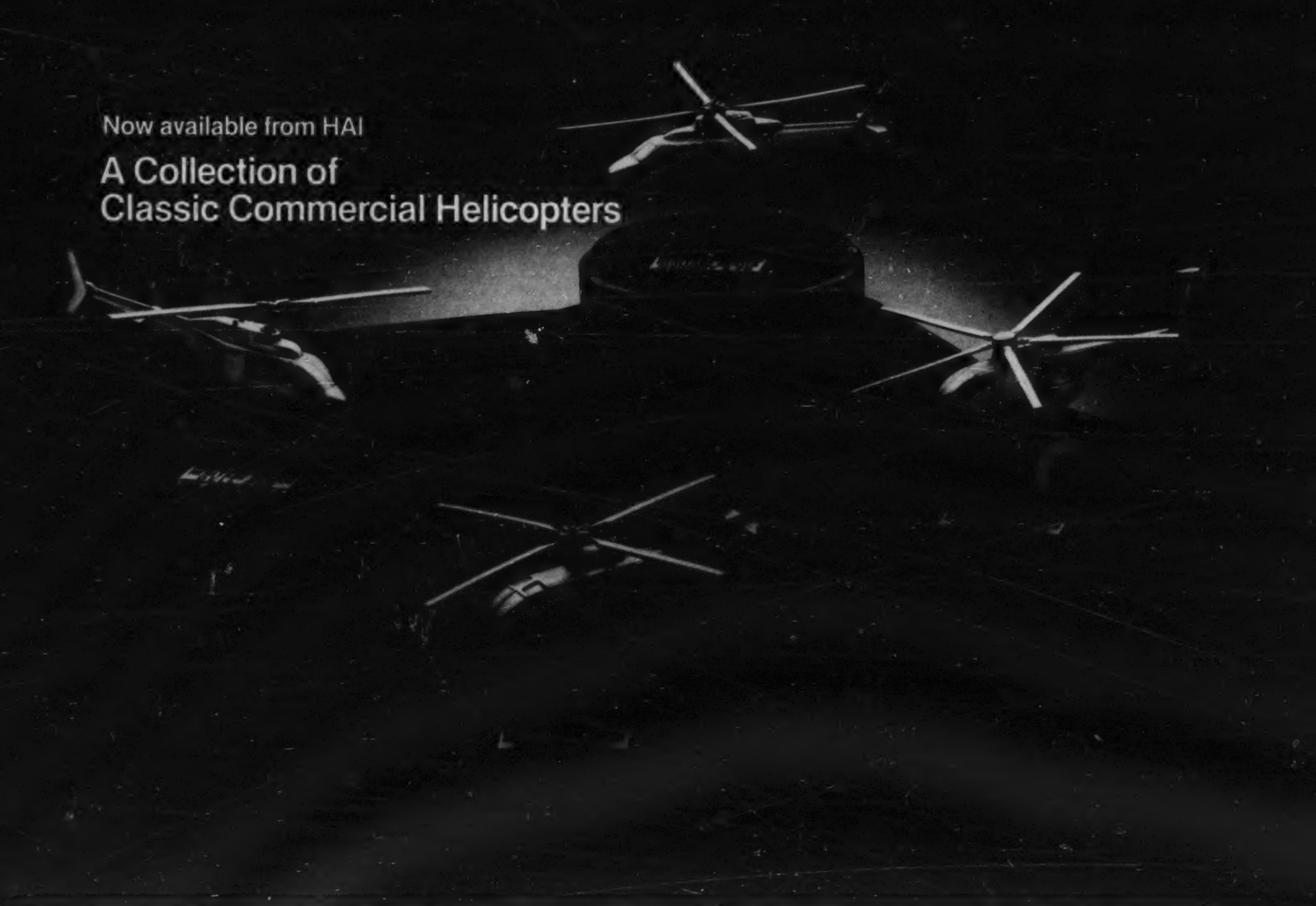
Cedar Rapids Police Dept.
Cedar Rapids, IA

Central Air Service, Inc.
Lewistown, MT

Central B.C. Helicopters Ltd.
Kamloops, BC, Canada

Central Flying Service, Inc.
Adams Field
Little Rock, AR 72202
☎501-375-3245
Chairman: Donald Holbert
Operations: Air taxi/charter (US part 135),
Electronic news gathering, Executive transport,
Patrol (power, pipeline, buried cable),
Photography, Repair station (FAA certified)
Helicopters: **1**-206B

* Indicates that complete membership application has been received and is now being processed in accordance with official HAI Bylaws.



Now available from HAI

A Collection of Classic Commercial Helicopters

Handcrafted in finest quality pewter

Your association has long sensed the need to create a matched collection of pewter replicas of classic helicopters ... to be made available at a reasonable cost.

HAI has commissioned one of the most experienced pewter model makers available in order to bring you the *Helicopter Heritage Series.*

A collector's delight

The helicopter replicas are meticulously handcrafted and finished to a handsome luster. Each replica will be approximately 4½ inches in length, realistically mounted in typical flight attitudes.

Start your collection now

You can order the first four helicopters offered in the series now: the Bell 206, the Hughes 500D, the Sikorsky S-76, and the MBB BO105.

An exceptional offer

The price of each replica is $60.00 to members ($70.00 to non-members) plus shipping and handling. If you are not entirely satisfied with any replica you receive, you may return it for replacement or refund. Order today.

Helicopter Association International
1619 Duke Street
Alexandria, VA 22314-3406

Helicopter Association International

Please send me the following pewter replicas:

☐ Bell 206 ☐ Hughes 500D ☐ Sikorsky S-76 ☐ MBB BO105
☐ As an HAI member, my cost is ☐ $60.00 each
☐ As a non-member, my cost is ☐ $70.00 each

For shipping, handling & insurance;
Within the U.S., add $3.00 per model, outside the U.S., add $4.50 for surface or $9. for airmail per model.

Name ______________________
Company ______________________
City ____________ State ____________ Zip ____________
Business telephone ______________________
My total purchase is $ ____________ , I wish to pay by:
☐ Check or money order ☐ Visa ☐ MasterCard
Card No. ____________ Expiration date ____________
Signature ______________________

VA residents add 4% sales tax. HAI reserves the right to alter this program at any time.

☐ I will be interested in the following replicas, as they become available (no obligation at this time).

☐ Agusta 109
☐ Boeing 234
☐ Enstrom Shark
☐ Hiller FH1100
☐ Aerospatiale AStar
☐ Westland 30
☐ Robinson R22
☐ Other ____________

☐ I would like put on the Heritage Series mailing list for future model releases.

Central Helicopters, Inc.
Bozeman, MT

Central Santos Lopez Co.
Iloeilo, Philippines

Centurian Helicopter Ltd.
Calgary, AB, Canada

Centurion Airways
Santa Ana, CA

Century Helicopters
British Columbia, Canada

Certeza Surveying Co., Inc.
Quezon City, Philippines

Charleston County Police Department
North Charleston, SC

Charter-Air, Inc.
Portsmouth, NH

Chartercopter Service
New Canaan, CT

Chem-Air, Inc.
Shreveport, LA

Chevron U.S.A. Inc.
P.O. Box 26845
New Orleans, LA 70186
☎504-241-2120 ☐058243
Manager, Aircraft Services: W.S. Wakefield
Manager, Aircraft Operations: Herman O. Moore
Chief Pilot: C.K. Roberts
Maintenance Supervisor: R.H. Wild
Operations: Corporate (US part 91, not for hire),
Offshore
Helicopters: **18**-206B,**3**-S62/,**6**-S76A

Chicago Fire Department
Air/Sea Rescue Section
1500 S. Lake Shore Drive
Chicago, IL 60605
☎312-744-4718
Commissioner: Charles B. Roberts
Operations Manager: George E. Tannehill
A & I: Fred Marshal
Operations: EMS/air ambulance, Fire control/support
Government agency (not for hire),
Law enforcement (not for hire), Traffic surveillance
Helicopters: **1**-206B,**1**-204B,**1**-47G4

Chicago Helicopter Airways
Chicago, IL

Chisum Flying Service Alaska
Cordova, AK

Brian Chuchua's Jeep, Inc.
776 S. Placentia Avenue Placentia, CA 92670
☎714-879-5337 ☐655-460
Owner/President: Brian Chuchua
Pilot/Maintenance: Michael R. Aubuchon
Operations: Corporate (US Part 91, not for hire)
Photography
Helicopters: **1**-F28C,**1**-F28A,**1**-F28O,**1**-206B

Chugiak Aviation
Chugiak, AK

Churchhill Falls Labrador Corp.
P.O. Box 256
Churchill Falls, LB, A0R 1A0, Canada
☎709-925-3405 ☐0162287
President: Brian McGrath
Operations Manager: Jack Murphy
Chief Pilot, Helicopters: Charles Ramsey
Operations: Corporate (US part 91, not for hire),
EMS/air ambulance, Executive transport,
External cargo, Fire control/support,
Patrol (power, pipeline, buried cable)
Helicopters: **1**-205A,**1**-206B,**1**-206L

Cie Aerienne Ardic Cameroon
Douala-Akwa, Cameroon

Cimarron Helicopter, Inc.
Oklahoma City, OK

Cincinnati Airways, Inc.
Cincinnati, OH

Citicopters, Inc.
Van Nuys, CA

City & Country Helicopters
Caloundra, Queensland, Australia

City of Fort Worth Helicopter Services
1400 Nixon Street
Fort Worth, TX 76102
☎817-870-8310
Chief Pilot: Al Smith
Pilot: Dave Ankerberg
Pilot: Jerry Toman
AI: Kenneth Hughey
Operations: Executive transport, Fire control/support,
Government agency (not for hire),
Law enforcement (not for hire), Photography,
Pollution detection/monitoring, Traffic surveillance
Helicopters: **1**-206B

City of Los Angeles
8060 Balboa Boulevard
Van Nuys, CA 91406
☎818-989-8574
Director, Fleet Services: Clifford G. Welsh
Chief Pilot, Fleet Services: James Garner
Captain, L.A.F.D.: Kenneth L. Dameron
General Manager: Sylvia Cunliffe
Captain: Robert L. Hart
Commanding Officer: Robert O. Woods
Operations: Construction, Executive transport,
External cargo, Government agency (not for hire),
Patrol (power, pipeline, buried cable),
Photography, Traffic surveillance
Helicopters: **3**-206B,**1**-UH1B,**1**-47G3,**1**-47J2

City of Roswell
Roswell, NM

City of Virginia Beach
Room 225
Public Safety Building
Virginia Beach, VA 23456
☎804-427-4192
President/CEO: Thomas H. Muchlenbeck
Emergency Services Coordinator: R. Lee Eskey
Operations: Government agency (not for hire),
Law enforcement (not for hire), Photography
Helicopters: **2**-47G3

Clarinda Flying Service
Clarinda, IA

Clarke Outdoor Spraying Co.
Roselle, IL

Clarksville Helicopter Service
Clarksville, TN

Classic Helicopter Corp.
Sandy, UT

Classic Helicopter Corp.
Seattle, WA

Clay Lacy Aviation
Van Nuys, CA

Clayton County Police Dept.
Jonesboro, GA

Clear Shake, Inc.
Clear Lake, WA

Cleary Brothers (Bombo) Pty. Ltd.
Port Kembla, NSW, Australia

Clinton Aviation Group, Inc.
Houston, TX

Clover, Inc.
Hereford, TX

Coast Air Charter Ltd.
Greymouth, New Zealand

Coast Mountain Air Rescue Society
West Vancouver, BC, Canada

Coastal Flying Service Inc.
El Campo, TX

Coastal Helicopters Inc.
Cotulla, TX

Codiac Helicopters, Ltd.
Moncton, NB, Canada

Coker Aviation Training Center
Grand Prairie, TX

Colgate-Palmolive Company
333 Industrial Avenue
Teterboro, NJ 07608
☎201-288-1811 ☐134707
Senior Captain: George M. Jones
Chief of Maintenance: Frank De Santo
Operations: Corporate (US part 91, not for hire)
Helicopters: **1**-BK117

Collingwood Air Services
Collingwood, ON, Canada

Collins Brothers Corporation
Terrible Herbst Inc.
P.O. Box 42427
Las Vegas, NV 89116
☎702-736-6151
Principal: E.A. Collins
Principal: M.M. Collins
Principal: Jerry Herbst
Chief Pilot: Willis Griffin
Chief Helicopter Pilot: Ray Christopher
Operations: Corporate (US part 91, not for hire)
Helicopters: **1**-206L

Collins Helicopter Service Inc.
West Chester, PA

Colonial Helicopters Inc.
Norfolk, VA 23523

Colony Helicopters
Labelle, FL

Colorado Airlift Inc.
13000 E. Control Tower Road
Englewood, CO 80112
☎303-841-5552
President: Creig Dunn
Operations: Air taxi/charter (US part 135),
Construction, External cargo
Helicopters: **1**-313B

Colorado State Patrol
Denver, CO

Colt Executive Aviation
Glouschester, England

Columbia Helicopters, Inc.
P.O. Box 3500
Portland, OR 97208-9952
☎503-678-1222 ☐360307
President: Wes Lematta
Executive Vice President: Roy Simmons
V.P. Sales/Marketing: Jon A. Lazzaretti
Vice President/Maintenance: Jack Pyle
Operations: Air taxi/charter (US part 135),
Construction, Exploration, External cargo,
Fire control/support, Government contracting,
Logging, Offshore,
Patrol (power, pipeline, buried cable),
Repair station (FAA certified)
Helicopters: **10**-B107,**2**-B234,**4**-H12E,**2**-S76A,
1-206B

Columbus Aviation, Inc.
Columbus, OH

Columbus Ohio Police
Columbus, OH

Comando en Jefe del Ejercito
Buenos Aires, Argentina

Command Airways (Pty) Ltd.
Johannesburg, South Africa

Command Helicopters, Inc.
Joliet, IL

Commander Airways
Tampa, FL

Commander Aviation Corp.
Mandan, ND

Commander Mexicana
Mexico, D.F. Mexico

Commander-Aero, Inc.
Xenia, OH

Commercial Aviation
Fort Lauderdale, FL

Commercial Aviation Pty. Limited
P.O. Box 309
Revesby, NSW, 2212, Australia
☎02-707-4200 ☐AA74478
General Manager: Phill M. Gant
Chief Pilot: Wally Watkins
Operations: Exploration, External cargo, Offshore
Helicopters: **1**-B212,**1**-330J

Commercial Helicopters Ltd.
Taumarunui, New Zealand

Commodore Helicopters
240 Redwood Highway
Mill Valley, CA 94941
☎415-332-4482
President: Lu Hurley
Director of Operations: John Heene
General Manager: Roberta Work
Operations: Air carrier (US part 127),
Air taxi/charter (US part 135),
Electronic news gathering, Executive transport,
Patrol (power, pipeline, buried cable),
Photography, Sightseeing, Traffic surveillance
Helicopters: **3**-206B,**1**-206L

Compass Helicopters
Bristol, England

Condor Helicopters & Aviation
Oxnard, CA

Connecticut Air Service
Danbury, CT

Conoco, Inc.
Aviation Department
Allegheny County Airport
W. Mifflin, PA 15122
☎412-469-0443 □86-6247
President/CEO: B.R. Brown
Operations Manager: W. Howard Morgan
Chief Pilot, Pittsburgh Div.: Andrew R. McGreever
Operations: Corporate (US part 91, not for hire),
Executive transport
Helicopters: **1**-S76A

Conqueror Fishing Corp.
San Diego, CA

Conrich Aviation
Knoxville, TN

Consejo de Recurose Minerales
Mexico, D.F., Mexico

Consolidated Gas Supply Corp.
Clarksburg, WV

Consolidated Georex Geophysics
Denver, CO

Consolidated Heliflight Inc.
Stroud, OK

Construction Helicopters Inc.
Canton, MI

Consumers Power Company
212 W. Michigan Avenue
Jackson, MI 49203
☎517-788-0360
Vice President: R. C. Lincoln
Operations Manager: William J. Meadowcroft
Chief Pilot: Clifford W. Schmidt
Chief of Maintenance: James J. Hirsch
Operations: Corporate (US part 91, not for hire),
Executive transport, Forestry, general,
Patrol (power, pipeline, buried cable)
Helicopters: **3**-206B

Continental Camera, Inc.
Van Nuys, CA

Continental Helicopters, Inc.
P.O. Box 1487
Provo, UT 84603
☎801-225-8910 □453005
President: L. Tom Nicol
Vice President & Manager: C. Gary Fitzgerald
Chief Pilot: Timothy G. Henthorn
Director of Maintenance: Michael J. Richardson
Operations: Air taxi/charter (US part 135),
Construction, EMS/air ambulance,
Executive transport, Exploration,
External cargo, Fire control/support,
Forestry, general, Government contracting,
Patrol (power, pipeline, buried cable),
Photography, Repair station (FAA certified), Skiing
Helicopters: **6**-315B,**2**-316B,**2**-206B,**3**-206L

Continental Illinois National Bank and Trust Company
Air Transportation
231 S. LaSalle Street
Chicago, IL 60693
☎312-923-3576 □253412
Unit Manager, Transportation: Fred Wagner
Chief Pilot: Sterling West
Maintenance: Steve Dorich
Aviation Safety Officer: Edward Ban
Operations: Bank paper transportation,
Corporate (US part 91, not for hire),
Executive transport
Helicopters: **3**-206L

Contract Aviation Services Inc.
Lexington, KY

Contractors Crane Services Inc.
Morrisville, VT

Contractors Helicopters Inc.
Houston, TX

Cookson Airspread, Ltd.
Feilding,, New Zealand

Cooper Copters Inc.
Mount Vernon, WA

Copter Inc.
Peninsula, OH

Copters Unlimited Inc.
Laconia, NH

Cordoba Helicopters, Inc.
Highstown, NJ

Corporate Jets Inc.
West Mifflin, PA

Corpus Christi Oil & Gas
Corpus Christi, TX

Corvallis Aero Service Inc.
Corvallis, OR

Costa Mesa Police Department
Costa Mesa, CA

Country Boy Crop Dusting Co.
Tolleson, AZ

County of Los Angeles Fire Department
12605 Osborne Street
Pacoima, CA 91042
☎818-899-2556
Chief, Air Operations: James M. Sanchez
Chief of Maintenance: Douglas Mathews
Operations: Fire control/support,
Government agency (not for hire)
Helicopters: **1**-206B,**1**-204B,**3**-205A

HELICOPTER MAINTENANCE
FROM COLUMBIA HELICOPTERS, INC.

We're meticulous about every detail.
And we understand your immediate needs.
You wouldn't want it any other way.

COLUMBIA HELICOPTERS, INC.
Aurora State Airport
Aurora, Oregon 97002

Mailing address:
P.O. Box 3500, Portland, OR 97208
Telephone: (503) 657-1111 Telex 36 0307

Engines
Complete repair/balancing/overhaul of Allison 250 series, GE CT-58 series; accessories

Hydraulics
Overhaul actuators, servos, pumps; Bell, Boeing Vertol

Components
Rotor system, transmission overhaul/repair; sheet metal repair; NDT facility; complete component overhaul/repair on Bell, Boeing Vertol, Hiller; avionics, instruments, electrical repair/overhaul/installation

FAA REPAIR STATION #4590

COMPETITIVE PRICING

QUICK TURN-AROUND TIME

County of Ventura Public Safety Aviation Unit
275 E. Pleasant Valley Road
Camarillo, CA 93010
☎805-484-3601
Pilot: Chris Spangenberg
Operations: EMS/air ambulance, Fire control/support,
Government agency (not for hire),
Law enforcement (for hire)
Helicopters: **1**-47G3,**3**-204B

Court Helicopters (PTY) Limited
P.O. Box 2546
Cape Town, 8000, South Africa
☎932-9211/252965 ☐520696
Chairman: J.J.M. Van Zyl
Managing Director: C.J. Labuschagne
Operations Manager: K. Zehrt
Chief Engineer: G. Spreadbury
Operations: Agriculture, Air taxi/charter (US part 135),
Construction, Executive transport,
Government contracting, Herding (stock & wildlife),
Law enforcement (for hire), Offshore,
Patrol (power, pipeline, buried cable),
Photography, Pilot training school,
Sightseeing, Traffic surveillance
Helicopters: **1**-S62A,**6**-S58T,**1**-S61N,**4**-47G5,
6-206L,**4**-206B,**1**-H12E,**1**-269C

Cove Helicopter Service Inc.
Addison, IL

Craig Helicopter Inc.
Craig, CO

Crane Helicopter Services, Inc.
P.O. Box 4041
Fremont, CA 94539
☎415-657-3001
President: Steven W. Lotspeich
Director of Maintenance: John T. DeStories
Operations: Air taxi/charter (US part 135),
Construction, Exploration, External cargo,
Fire control/support, Forestry, general,
Government contracting,
Patrol (power, pipeline, buried cable), Photography
Helicopters: **1**-S58T,**1**-500C

Crasberger & Austel
Oedheim, West Germany

Crescent Airways, Inc.
N. Perry Airport
7501 Pembroke Road
Hollywood, FL 33023
☎305-987-1900 ☐9109976548
President: Larry D. Stevens
Vice President: Dean H. Shealey
Director of Operations: William Evans
Director of Maintenance: Gary J. Freeman
Operations: Air taxi/charter (US part 135),
EMS/air ambulance, Fire control/support,
Photography, Pilot training school
Helicopters: **17**-206B,**1**-206L

Crescent Helicopters, Inc.
Bellwood, IL

Crescent Helicopters, Inc.
Gary, IN

Crew Concepts, Inc.
2950 S. Owyhee Street
Boise, ID 83705
☎208-344-4691
President: John J. Shelstad
Secretary/Treasurer: Keith Watson
V.P. Public Relations: Charlie Minshew
Director of Maintenance: Harold DeGrange
Operations: Air taxi/charter (US part 135),
Construction, Executive transport,
Exploration, External cargo, Fire control/support,
Forestry/general, Law enforcement (for hire),
Patrol (power, pipeline, buried cable), Skiing
Helicopters: **1**-B212

Croman Corporation
Medford, OR

Crop Cair
Marion, NY

Crop Fertility Specialists Inc.
Winamac, IN

Crop Flight Inc.
Greenfield, CA

Crowsnest Air, Ltd.
Sparwood, BC, Canada

Cruzeiro Taxi Aereo S.A.
Av. Almirante Frontin, 381
Rio de Janeiro, 21030, Brazil
☎021-270-8582 ☐21859
President: Leopoldino Amorim
Operations Director: Aristo Neves
Chief Pilot: Baudry Lins
Superintendent Director: Renato J. Rosenburg
Operations: Air taxi/charter (US part 135),
External cargo, Offshore, Photography,
Sightseeing, Logging, Executive transport, Exploration
Helicopters: **3**-330J,**9**-318C,**7**-350B,**5**-206B

Cumberland Corporation
South Windham, ME

Custom Helicopters Ltd.
Box 249, Station A
Winnepeg, MB, R3K 2A1, Canada
☎204-338-7953 ☐0757133
President: J.M. Hawes
Vice Pres./Operations Manager: E.W. Derkach
Vice President: D.R. McDougall
Chief Pilot: S.H. Beeman
Operations: Agriculture, Air taxi/charter (US part 135),
Construction, Exploration, External cargo,
Fire control/support, Forestry, general,
Government contracting, Herding (stock & wildlife),
Patrol (power, pipeline, buried cable),
Photography, Repair station (FAA certified)
Helicopters: **11**-206B

Custom Helicopters, Ltd.
Winnepeg, MB Canada

Cypress Helicopters
Thidodaux, LA

D & G Air Service
East Freetown, MA

D. C. Helicopters
Cohocton, NY

D.O.C., Inc.
5161 River Road
Bethesda, MD 20816
☎301-951-1300 ☐898452
President: Philip E. Hixon
Vice President: Victor Garaycochea
Operations: Executive transport
Helicopters: **2**-206B

DHL Airways Inc.
Houston, TX

DOT Aircraft Corporation
Westlake, OH

Dakota Helicopters, Inc.
Beulah, ND

Dallas County Sheriff's Dept.
Selma, AL

Dallas Police Department
Helicopter Section
5775 South Hampton Road
Dallas, TX 75232
☎214-339-3109
Commander of Helicopter Section: Lt. Will Ricketts
Chief Mechanic: Rudy Liza
Operations: Law enforcement (not for hire)
Helicopters: **2**-206B,**2**-B47G

Damin Aviation Corporation
900 Lincoln Harbor
Weehawken, NJ 07087
☎201-863-7200 ☐857634
Vice President: Peter C. Wendt
V.P. Sales/Marketing: Anthony Amanzio
Chief Pilot: Gaylord B. Robinson
Operations: Air taxi/charter (US part 135),
Bank paper transportation,
Corporate (US part 91, not for hire),
Electronic news gathering, Executive transport,
Law enforcement (for hire),
Patrol (power, pipeline, buried cable),
Photography, Repair station (FAA certified),
Traffic surveillance
Helicopters: **4**-B222,**12**-350D,**3**-S76A,**1**-206B

Dana Corporation
Route 4
P.O. Box 297A
Swanton, OH 43558
☎419-535-4625 ☐286402
Director: Carl Ramsey
Operations: Corporate (US part 91, not for hire)
Helicopters: **1**-S76A

Danaher Equipment Corp.
North Canton, OH

Danair, Inc.
Toledo, OH

Darvill Helicopters, Ltd.
Grande Prairie, AB, Canada

Data General Corporation
4400 Computer Drive
Westboro, MA 01580
☎617-366-8911 ☐7103901217
Chief Pilot: John Anderson
Operations: Corporate (US part 91, not for hire)
Helicopters: **1**-206L

Daybreak Farms Inc.
Battle Ground, WA

Daytona Beach Aviation
Daytona Beach, FL

De Brie Helicopters
Delano, CA

De La Societe Lufttransport S.A.
Cotonu, Benin

DeKalb County Police Department
Decatur, GA

DePauw Construction, Inc.
Amarillo, TX

DeVan-Weber Helicopters, Inc.
Convent, LA

Deans Air Service
McCune, KS

Deer Trappers Aerial Ltd.
Invercargill, New Zealand

Del Air Inc.
Bayard, WV

Delaware State Police
Dover, DE

Delray Training Center Inc.
Delray Beach, FL

Delta Air Corp.
Manila, Philippines

Delta Avia Fluggerate GmbH
Winningen, West Germany

Delta Helicopter School, Ltd.
Delta, BC, Canada

Delta Helicopter Service, Inc.
47 Eastern Boulevard
Glastonbury, CT 06033
☎203-633-1808
President: Herbert G. Chambers
Chief Pilot: Thomas R. Flanagan
Operations: Air taxi/charter (US part 135),
Bank paper transportation, Electronic news gathering,
Executive transport, Forestry, general,
Government contracting,
Patrol (power, pipeline, buried cable),
Photography, Sightseeing, Skiing,
Traffic surveillance
Helicopters: **1**-206B

Delta Helicopters Ltd.
High Level, AB, Canada

Corwin D. Denney
9500 Wilshire Boulevard
Beverly Hills, CA 90212
☎213-275-4589
Owner: Corwin D. Denney
Operations: Private owner
Helicopters: **1**-206B

Denver Police Helicopter Unit
Denver, CO

Departmento del Distrito
Federal - Servicios Aereos
Apartado Postal 9-007
Mexico, D.F., 15620, Mexico
☎905-558-2416
Chief Pilot: Captain Max F. Diaz
Operations: Government agency (not for hire)
Helicopters: **1**-B212

Department of Aviation
Aircraft Data Section
P.O. Box 367
Canberra City, A.C.T. 2601, Australia
☎684051 ☐62221
Aircraft Data Officer: P.H. Meier
Operations: Government agency (not for hire)

Department of Aviation
Victoria, Australia

Department of Aviation
Canberra City, Australia

Department of State
Washington, DC

Department of Transport
Ottawa, ON, Canada

Derazona Air Service P.T.
P.O. Box 283/JKT
Jakarta, Indonesia
☎486590 ☐48179
President: Ken Broyles
Director: Asril Lamisi
Flight Operations Manager: Milton C. Smith
Maintenance Manager: Brock L. Wright
Operations: Air taxi/charter (US part 135)
Helicopters: **8**-B212,**8**-206B,**1**-313B

Detenal Transportes Aeroes
Mexico, D.F., Mexico

Detroit Police Department
Detroit, MI

Diamond Aviation, Inc.
Pasadena, TX

Diamond Shamrock Aviation Co.
Blue Grass Field
Lexington, KY 40510
☎606-666-7581
Pilot: Dean Sinor
Operations: Corporate (US part 91, not for hire)
Helicopters: **1**-206L

Digham Ltd.
Toronto, ON, Canada

Digital Equipment Corporation
Hangar 5
Hanscom Field
Bedford, MA 01730
☎617-276-4980
President: Kenneth Olsen
Chief Pilot: Thomas Chestnut
Maintenance Manager: Walter Hansen
Douglas Hammond
Operations: Corporate (US part 91, not for hire),
Executive transport
Helicopters: **8**-206B

Dinaland Aviation
Vernal, UT

Diversified Helicopter Service
Tacoma, WA

Division Of Aeronautics
Sacramento, CA

Doan Helicopter Inc.
Daytona, FL

The Dolezal Company
4251 S. Higuera Street
San Luis Obispo, CA 93401
☎805-544-3990
President: Warren F. Dolezal
Operations Director: Brad W. Dolezal
Operations: Air taxi/charter (US part 135),
Construction, Electronic news gathering,
Executive transport, External cargo,
Fire control/support, Forestry, general,
Government contracting,
Law enforcement (for hire), Offshore,
Patrol (power, pipeline, buried cable),
Photography, Sightseeing, Skiing, Traffic surveillance
Helicopters: **1**-206L

Dollar Air Services Limited
Coventry Airport
Coventry CV8 3AZ, England
☎0203-304231 ☐311392
Chairman: D.G. Dollar
Managing Director: Michael J. Orme
Chief Pilot: Michael Cull
Engineering Director: R. Neep
Operations: Agriculture,
Air taxi/charter (US part 135), Construction,
EMS/air ambulance, Executive transport,
Exploration, External cargo,
Fire control/support, Forestry, general,
Government contracting, Logging,
Patrol (power, pipeline, buried cable),
Photography, Pilot training school,
Pollution detection/monitoring,
Repair station (FAA certified), Sightseeing,
Traffic surveillance
Helicopters: **10**-206B,**2**-315B,**1**-350B,
6-B47G,**2**-SL47

Dolphin Aviation Inc.
Sarasota, FL

Dome Petroleum Ltd.
770 McTavish Road, N.E.
Calgary, AB, T2E 7G6, Canada
☎403-291-4722 ☐03826883
Chief Pilot, Rotary Wing: Selwyn House
Operations: Corporate (US part 91, not for hire),
Executive transport, External cargo, Offshore
Helicopters: **1**-S61N,**1**-S76A

Dominion Pegasus Helicopters
Dryden, ON, Canada

Don Davis Aviation
Henderson, KY

Don's Helicopter Service, Inc.
Gretna, NE

Dooley Helicopters, Inc.
2003 Flightway Drive
Dekalb Peachtree Airport
Chamblee, GA 30341
☎404-458-3431
President: Richard E. Budd, Jr.
General Manager: Ronald S. Lohmeier
Operations: Air taxi/charter (US part 135),
Electronic news gathering,
Executive transport, Photography,
Repair station (FAA certified), Traffic surveillance
Helicopters: **6**-206B,**1**-206L,**1**-269C

Announcing the . . . ***R22 Beta***

ADDED FEATURES:

- Larger Panel for Artificial Horizon and Directional Gyro
- 131 HP Takeoff Rating
- Longer - life muffler
- Raised exhaust for high grass
- Heater/Defogger with forward outlet
- Larger oil cooler for hot weather
- Elastic teeter stop for windy starts
- Rotor Brake Standard

OTHER R22 FEATURES

- 110 MPH Cruise
- 7 to 8 GPH Fuel Consumption
- 30¢ per Road Mile
- Simplified Maintenance
- Over 500 R22's Delivered
- Over 80 Service Centers
- 2000 Hour Engine TBO
- 2000 Hours All Major Components

SPECIFICATIONS

Max Airspeed (Vne)	118 MPH	Gross Weight	1,370 LB
Max Range	over 300 Miles	Empty Weight Equipped	826 LB
Maximum Ceiling	14,000 Feet	Normal Fuel (19.2 Gallons)	115 LB
Hover Ceiling IGE	6,970 Feet	Aux Fuel (10.5 Gallons)	63 LB
Hover Ceiling OGE	5,200 Feet	Pilot, Passenger & Baggage	429 LB

High Performance . . . Best Efficiency . . . Lowest Cost

For More Information, Call or Write:

ROBINSON HELICOPTER COMPANY

24747 CRENSHAW BOULEVARD • TORRANCE, CALIFORNIA 90505 U.S.A.
213/539-0508 • TELEX 18-2554 R H C TRNC

***Doosan Development Co. Ltd.**
34-2 Yoido-Dong, Young Deung Po-Ku
Seoul, Korea
☎783-1703-7 ☐22071
Representative: Hyuk Namgung
Assistant Manager: Lee Jae Hak
Assistant Manager: Soo Sam Su
Operations: Agriculture, Air taxi/charter (US part 135), Commuter/scheduled, EMS/air ambulance, Executive transport, Exploration, External cargo, Forestry/general, Government contracting, Offshore, Patrol (powerline, buired cable, pipeline), Photography, Pollution detection/monitoring, Sightseeing, Traffic surveillance
Helicopters: **1**-500D, **1**-206L, **1**-BK117

Douglas Air Services
Manilla, Phillipines

Dow Jones & Co.
P.O. Box 7006
West Trenton, NJ 08628
☎609-882-4516
Chief Pilot: Gregory Miller
Assistant Chief Pilot: Sandy Kaplan
Operations: Corporate (US part 91, not for hire)
Helicopters: **1**-B105

Downey Police Dept.
Downey, CA

Drug Enforcement Admin.
Phoenix, AZ

Drug Enforcement Admin.
Long Beach, CA

Drug Enforcement Admin.
Sacramento, CA

Drug Enforcement Admin.
Hollywood, FL

Drug Enforcement Admin.
Opa Locka, FL

Drug Enforcement Admin.
Glynco, GA

Drug Enforcement Admin.
New Orleans, LA

Drug Enforcement Admin.
Baltimore, MD

Drug Enforcement Admin.
St. Louis, MO

Drug Enforcement Admin.
Englewood, NJ

Drug Enforcement Admin.
Albuquerque, NM

Drug Enforcement Admin.
Philadelphia, PA

Drug Enforcement Admin.
South Charleston, SC

Drury Flying Service
Eugene, OR

Duncan Aviation, Inc.
P.O. Box 81887
Lincoln, NE 68501
☎402-475-2611 ☐484365
Secretary/Treasurer: Harry O. Barr
Operations: Air taxi/charter (US part 135), EMS/air ambulance, Executive transport, Pilot training school, Repair station (FAA certified)
Helicopters: **1**-206A,**1**-206L,**1**-B212

Duquesne University Police
Pittsburgh, PA

Dye Creek Cattle Company
Red Bluff, CA

EJ Helicopters, Inc.
(Electronic Journalism)
321 N. Hollywood Way
Burbank, CA 91505
☎818-841-0401
President: Robert H. Pettee, Jr.
Chief Advisor: Neil Bos
Operations: Air taxi/charter (US part 135), Electronic news gathering
Helicopters: **1**-206B

E.I. Du Pont Nemours & Company
General Services Department
D 3131
Wilmington, DE 19898
☎302-774-7755
Manager, Services Section: Kendall S. Tesh
Craig Wheel
Operations: Corporate (US part 91, not for hire), Executive transport
Helicopters: **1**-S76A

ERA Helicopters, Inc.
6160 S. Airpark Drive
Anchorage, AK 99502
☎907-248-4422 ☐09025324
President: David L. Baumeister
Executive Vice President: Charles W. Johnson
Senior Vice President: Will O'Brien
Vice President, Maintenance: Dana Rudd
Operations: Air Carrier, Air taxi/charter (US part 135), Commuter air carrier (scheduled), Executive transport, Exploration, External cargo, Fire control/support, Offshore, Repair station (FAA certified)
Helicopters: **16**-B212,**11**-B412,**2**-222UT,**2**-355F, **2**-204B,**4**-205A,**23**-206B,**12**-350D,**20**-B105, **1**-B234,**12**-206L,**2**-332AS

ERA Helicopters, Inc., (Gulf Coast)
P.O. Box 6566
Lake Charles, LA 70606
☎318-478-6131 ☐502459
Executive Vice President: Charles W. Johnson
Operations: Air taxi/charter (US part 135), Construction, Offshore, Patrol (power, pipeline, buried cable), Repair station (FAA certified)

Eagle Air Helicopters, Inc.
P.O. Box 1555
Forks, WA 98331
☎206-374-9276
President: James D. Mott
Operations: Air taxi/charter (US part 135), Construction, Exploration, External cargo, Fire control/support, Forestry, general, Government contracting, Logging, Photography
Helicopters: **1**-500D

Eagle Copters Ltd.
Calgary, AB, Canada

East Coast Helicopters, Inc.
2440 Mendon Road
Cumberland, RI 02864
☎401-769-5786
Chief Pilot: Russell J. Johnson
Operations: Air taxi/charter (US part 135), Electronic news gathering, Law enforcement (not for hire), Photography
Helicopters: **1**-206B

East Coast Helicopters, Inc.
Gettysburg, PA

East Kentucky Paving Corp.
Grayson, KY

East West Helicopter Inc.
Harrison, OH

Eastern Bay Regional Park Police
Castro Valley, CA

Eastern Helicopters Corp.
Hollins, VA

Royce Ebert
Kamish, ID

Ecuavia-Oriente S.A.
Quito, Ecuador

Edwards & Associates, Inc.
P.O. Box 3689
Bristol, TN 37625
☎615-538-5151 ☐553446
President: Robert B. McNab
Vice President: James Wolfe
Public Relations: Timothy Landis
V.P. Sales: David Blevins
Operations: Air taxi/charter (US part 135), Executive transport, Government contracting, Photography, Repair station (FAA certified), Sightseeing
Helicopters: **4**-206B,**1**-206L

Eagle Air Service GmbH
Baden-Baden, West Germany

Eichenberger Aviation AG
Buttwil, Switzerland

Eisenhut Aviation AG
Mauren, Liechtenstein

El Aero Services, Inc.
P.O. Box 149
Elko, NV 89801
☎702-738-7123
President: Joseph W. Green
Service Manager: Ted R. McBride
Chief Pilot: John M. Kelly
Manager: Jack Fulton
Operations: Air taxi/charter (US part 135), Executive transport, Exploration, External cargo, Fire control/support, Forestry, general, Government contracting, Herding (stock & wildlife), Law enforcement (for hire), Patrol (power, pipeline, buried cable), Repair station (FAA certified), Sightseeing, Skiing
Helicopters: **4**-206B,**3**-47G3,**1**-206L

El Espacio
Mexico City, D.F. Mexico

Elba Air Dusters
Elba, NY

Electricity Generating Authority of Thailand
Aviation Unit
Nonthaburi, Thailand
☎4240293
Aviation Unit: Thanut Boonyanunt
Operations: Executive transport, Government agency (not for hire), Patrol (power, pipeline, buried cable)
Helicopters: **1**-47G3,**2**-206A

Eli Transport Italiani SQS
Aosta, Italy

Eli-Alpi S.p.A.
Aosta, Italy

Elicaffaro S.p.A.
Milan, Italy

Elicompany SNC
Carpi, Italy

Eliconsorzio Viticoltori SNC
Asti, Italy

Elifriulia
Grado, Gorizia, Italy

Eliticino S.A.
Gordoola, Switzerland

Elilario
Como, Italy

Elilombardia
Clusone, Italy

Elinord-Servizi Aerotrasporti
Milan, Italy

Eliservizi Italiani
Masera, Italy

Elitalia S.p.A.
Trento, Italy

Elitaliana S.p.A.
Palermo, Italy

Elitelina
Sondrio, Italy

---

* Indicates that complete membership application has been received and is now being processed in accordance with official HAI Bylaws.

Elitos Helicopters S.p.A.
Via Nicolo Paganini, 66
Florence 50127, Italy
☎55-43961 ☐570616
Senior Director: Gian F. Blower
President: Osvaldo Gigliotto
Vice President: Emilio Drach
Operations: Air taxi/charter (US part 135),
Construction, Executive transport,
Exploration, External cargo,
Fire control/support, Forestry, general,
Mechanic training school, Offshore,
Patrol (power, pipeline, buried cable),
Pilot training school,
Pollution detection/monitoring
Helicopters: **6**-330J,**1**-B212,**1**-B412,
1-109A,**2**-B105

Ellwood Helicopters Ltd.
Opotiki, New Zealand

***K.W. Emerson Inc.**
Box 29 Arnold, CA 95223
☎209-795-1045
President: Ken Emerson
Operations: Corporate (US part 91, not for hire)
Helicopters: **1**-47G3

Emery Air Charter
Rockford, IL

Emery Aviation Inc.
Greeley, CO

Emory Aviation, Inc.
3333 Hitchcock Drive
Denison, TX 75020-8496
☎214-786-3333 ☐730294
Chairman & CEO: Gregory T. Hitchcock
President: James Carl Paris
Operations: Corporate (US part 91, not for hire)
Helicopters: **1**-206B

Energy Fuels Nuclear, Inc.
Denver, CO

Energy Helicopters, Inc.
P.O. Box 9023
401 Glynn Avenue
Houma, LA 70361
☎504-876-0080
President: William Clifford Smith
Director of Operations: Peter Luistro
General Manager: T.L. Duhe
Chief Pilot: Thomas Triplett
Operations: Air taxi/charter (US part 135),
Repair station (FAA certified), Construction,
Corporate (US part 91, not for hire),
Executive transport, Exploration,
External cargo, Offshore,
Patrol (power, pipeline, buried cable), Photography
Helicopters: **2**-500D,**6**-350D,**5**-355F

Englehart Aviation
Covina, CA

Enterprise Helicopters, Inc.
Reno, NV

Envirogas, Inc.
One Grimsby Drive
Hamburg, NY 14075
☎716-648-3400
Director of Flight Operations: Tony Cosimano
Operations: Corporate (US part 91, not for hire)
Helicopters: **2**-5OOD,**1**-350B,**1**-355E

Erickson Air Crane Co.
3100 Willow Springs Road
P.O. Box 3247
Central Point, OR 97502
☎503-664-5544 ☐15-1673
President: Jack Erickson
General Manager: Jack Montgomery
Director of Sales: Lee Ramage
Director of Maintenance: Sandy Ellis
Operations: Construction, External cargo,
Forestry, general, Government contracting,
Logging, Repair station (FAA certified)
Helicopters: **1**-204B,**1**-206B,**4**-S64E,**1**-47G3

Esen Associates VIII
Rochester, NY

Esso Australia Ltd.
P.O. Box 372
Sale, Victoria, 3850, Australia
☎051-495201 ☐AA55120
Helicopter Div. Superintendent: A.R. Adams
Operations Supervisor: M.J. Ward
Aviation Advisor: M.J. Meehan
Aviation Advisor: J.C. Ross
Chief Pilot: L.D. Knight
Operations: Commuter air carrier (scheduled),
Corporate (US part 91, not for hire),
EMS/air ambulance, Executive transport,
Exploration, External cargo,
Mechanic training school, Offshore,
Photography, Pilot training school,
Private owners, Repair station (FAA certified)
Helicopters: **6**-S76A,**3**-B212,**2**-205A

Estlin Air Services Ltd.
Chetwynd, BC, Canada

Euralair
Paris, France

Evergreen Air Center, Inc.
Marana, AZ

Evergreeen Aviation
Knoxville, TN

Evergreen Helicopters Inc.
3850 Three Mile Lane
McMinnville, OR 97128
☎503-472-9361 ☐360841
President: Delford M. Smith
Sr. Vice President Marketing: Bob Fox
Vice President Operations: Harold Eighme
Director of Operations: Wade Green
Chief Pilot: Terry Olsen
Operations: Agriculture,
Air taxi/charter (US part 135),
Bank paper transportation, EMS/air ambulance,
Exploration, External cargo,
Fire control/support, Forestry, general,
Government contracting, Logging, Offshore, Patrol
(power, pipeline, buried cable),
Photography, Repair station (FAA certified)
Helicopters: **1**-S64,**13**-B212,**8**-205A,
7-315B,**7**-316B,**1**-BK117,**19**-206B,
3-206L,**10**-B105,**17**-500D,**9**-SL12,
2-H12E,**4**-318C

Evergreen Helicopters, Inc.
Prattville, AL

Evergreen Helicopters, Inc.
Atlanta, GA

Evergreen Helicopters, Inc.
Abbeville, LA

Evergreen Helicopters, Inc.
Cameron, LA

Evergreen Helicopters, Inc.
Angleton, TX

Evergreen Helicopters, Inc.
Corpus Christi, TX

Evergreen Helicopters, Inc.
Galveston, TX

Evergreen Helicopters, Inc.
Basingstoke, Hants, England

Evergreen Helicopters of Alaska, Inc.
Anchorage, AK

Evergreen Helicopters of Alaska, Inc.
Nome, AK

Evergreen Helicopters of Alaska, Inc.
Prudhoe Bay, AK

Execu-Rotors Helicopters
Mississauga, ON, Canada

Execucorp
Bay Harbor Island, FL

Executive Air Fleet Corporation
90 Moonachie Avenue
Teterboro, NJ 07608
☎201-288-8400 ☐134408
President: F.J. Schmieder
Executive Vice President: W.B. Watt
Executive V.P./COD: J. Christiansen
V.P. Marketing/Sales: M. Moore
Operations: Air carrier (US part 127),
Air taxi/charter (US part 135),
Corporate (US part 91, not for hire), Executive transport
Helicopters: **4**-S76A,**1**-B105

25
YEARS
OF QUALITY

EVERGREEN AIR CENTER
The Aviation Experts
Helicopter Maintenance
Specialists
602-682-4181
Engine & Component Overhaul/Repair/Test • Major Modifications/Airframe Repair & Rebuild • Electrostatic Paint • Avionics & Configurations

EVERGREEN HELICOPTERS
World's Most
Experienced Operator
503-472-9361
Quality Globe-Spanning Rotary & Fixed Wing Support • Oil/Medevac/Utilities/Construction/Seismic/Forestry • Safety is our top Priority! Quality is our only Standard!

EVERGREEN AIRCRAFT SALES & LEASING
A World Leader in Aviation Sales
503-472-9361
Aircraft/Spares/Configurations/Parts Rentals

TWENTY FIFTH EVERGREEN ANNIVERSARY

CALL TODAY!
Our Customer is our Purpose.

Executive Air Link
P.O. Box 62025
Houston, TX 77205
☎713-230-1251
Chief Executive Officer: Michael Mark
Vice President, Sales & Service: H.T. Myers
Vice President, Flight Operations: Ronald Wright
Operations: Air taxi/charter (US part 135)
Helicopters: **1**-206L

Executive Air Link
Spring, TX

Executive Air Piper Sales, Inc.
Green Bay, WI

Executive Air Service Inc.
Williamstown, MA

***Executive Air Taxi Corp.**
P.O. Box 2273
Bismarck Airport
Bismarck, ND 58502
☎701-258-5024
President: Dennis Rohlfs
Director of Helicopter Operations/Chief Pilot:
Darrell E. Lewis
Operations: Agriculture, Air taxi/charter (US part 135),
Electronic news gathering, EMS/air ambulance,
Government contracting, Herding (stock & wildlife),
Patrol (power, pipeline, buried cable), Photography,
Repair station (FAA certified)
Helicopters: **1**-206B, **2**-206L

***Executive Airlift Helicopters Inc.**
5801 Marvin D. Love Freeway-Suite 103
Dallas, TX 75237
☎214-330-8167
President: Clarence J. Lott
Treasurer/General Manager: Deborah J. Lott
Chief Pilot: John M. Hammons
Director of Maintenance: Stephen J. Myra
Operations: Air taxi/charter (US part 135),
Executive transport,
Patrol (power, pipeline, buried cable),
Photography, Pilot training school,
Sightseeing, Traffic surveillance
Helicopters: **4**-206B

Executive Bell Limited
Santa Barbara, CA

Executive Helicopter, Inc.
5040 W. 63rd Street
Chicago, IL 60638
☎312-284-7385
Vice President: Roxanne M. Stamer
Operations Manager: Ralph C. Rosenbrock
Director of Maintenance: Daniel Feeney
Chief Pilot: Frederick "Chip" Wiggins
Operations: Air taxi/charter (US part 135),
Bank paper transportation,
Electronic news gathering, EMS/air ambulance,
Executive transport, External cargo,
Government contracting,
Patrol (power, pipeline, buried cable),
Photography, Repair station (FAA certified),
Sightseeing, Traffic surveillance
Helicopters: **1**-206B,**4**-F28A,**1**-206L,
1-F28C,**1**-355F

Executive Helicopters, Inc.
Atlanta, GA

Executive Jet Aviation, Inc.
Columbus, OH

Executive Jet Sales, Inc.
Columbus, OH

Express Helicopters Ltd.
Essex, England

Express Marine, Inc.
29th St. on the Delaware River
Camden, NJ 08105
☎609-541-4600
Chief Pilot: Jeffry A. Tait
Operations: Corporate (US part 91, not for hire),
Executive transport, Offshore
Helicopters: **1**-206L

Exxon Company USA
P.O. Box 60766
Houston, TX 77205
☎713-656-2503
Manager/Aviation: C.L. Andrus
Aviation Advisor: W.L. McKeown
Operations: Corporate (US part 91, not for hire),
Exploration, Offshore
Helicopters: **5**-S76A,**1**-B212,**1**-206L,
2-B412

FAF-Trabajos Aereos y Fotogrametricos S.A.
Barcelona, Spain

FBI
Denver, CO

FBI
Dallas, TX

FBI
Houston, TX

FBI
Fairfax, VA

Fairfax County Police Department
Fairfax, VA

Fairlift
Etampes, France

Fairmont Helicopter Service
Fairmont, BC, Canada

Falcon Helicopters Inc.
Kingston, ON, Canada

Far Eastern Air Transport
Taiwan, Republic of China

Farm & Forest Helicopter Services
Napavine, WA

Farm Air Service
Calipatria, CA

Farmers Aerial Spraying Services
Muleshoe, TX

Farmland Helicopters, Inc.
Kenyon, MN

Farwell Flying Service Inc.
Albion, NY

Federal Aviation Administration
Anchorage, AK

Federal Aviation Administration
Washington, D.C.

Federal Aviation Administration
Kansas City, MO

Federal Aviation Administration
Fort Worth, TX

Felts Field Aviation Inc.
Spokane, WA

Fenwick Aviation
Buc, France

Ferguson Helicopters
Sydney, NSW, Australia

Fieldair Holdings (Northern) Ltd.
Thames Aerodrome, New Zealand

Finning Tractor & Equipment Company Limited
555 Great Northern Way
Vancouver, BC, V5T 1E2, Canada
☎604-872-4444 □04 508717
Pilot: R.J. Jeffrey
Operations: Corporate (US part 91, not for hire)
Helicopters: **1**-341G

Fioordland Flights
Te Anau, New Zealand

First Pennsylvania Bank N.A.
Philadelphia, PA

Fiskflyg AB
Porjus, Sweden

Fjall-Flyg
Kiruna, Sweden

Fjallflygarna i Arjeplog AB
Laisvall, Sweden

Flathead Helicopters
Polson, MT

Fleet Helicopter Service
Coopersburg, PA

Flight International, Inc.
Atlanta, GA

Flight Test Engineering
Santa Clara, CA

Flight Trails Helicopters
Carlsbad, CA

Florida Aviation Corporation
Miami, FL

Florida Fish & Game
West Palm Beach, FL

Florida Highway Patrol
Tallahassee, FL

Florida Plant Growth
Fort Pierce, FL

Florida Power & Light Company
P.O. Box 029100
Miami, FL 33102
☎305-552-3858
Manager of Aviation: Breck L. Porter
Operations: Corporate (US part 91, not for hire)
Helicopters: **1**-206B,**1**-206L

Floyd County Police Department
New Albany, IN

Fluor Flight Operations
1150 South Vineyard Avenue
Ontario, CA 91761
☎714-983-3115
Senior Helicopter Captain: Mike Finnegan
Operations: Corporate (US part 91, not for hire)
Helicopters: **1**-S76A,**1**-206L

Fly By Helicopter Inc.
Toledo, OH

Fly Haas Helicopter Flugdienst GmbH
Vienna, Austria

Fly Wright
Federal Way, WA

Flying R Helicopters
Tillamook, OR

Ford Motor Credit Company
Dearborn, MI

Forest Copter Services, Inc.
Greenville, ME

Forestry Services Inc.
Randle, WA

Forex Inc.
Val D'Or, PQ, Canada

Fort Worth Aviation Inc.
Fort Worth, TX

Fosse Helicopter Services Ltd.
Warwickshire, England

Fostaire Helicopters
400 N. Wharf Street
St. Louis, MO 63102
☎314-421-5440
Vice President/General Manager: Clarke M. Thomas
Director of Maintenance: Herb Baldwin
Operations: Air taxi/charter (US part 135),
Electronic news gathering, EMS/air ambulance,
Executive transport, External cargo,
Government contracting,
Patrol (power, pipeline, buried cable),
Photography, Sightseeing, Traffic surveillance
Helicopters: **1**-47G2,**1**-206A,**2**-206B,
1-206L,**1**-47J/

Franconaves Ltda.
Guatemala, Guatemala

Franklin Logging Company
Mount Shasta, CA

Fraser, Inc.
27 Rice Street
Edmundston, NB, E3V 1S9, Canada
☎506-735-5551 □014-45538
President: Knut Grotterod
Operations Manager: Alex Smith
Chief Pilot: Brian Johnstone
Engineer: Richard Manning
Operations: Corporate (US part 91, not for hire),
Executive transport, Forestry, general
Helicopters: **1**-206L

Fredericton Helicopter, Ltd.
Oromomocto, NB, Canada

Freedom Helicopters, Inc.
Shelley, ID

Freemans of Bewdley (Aviation) Ltd.
Stourport, Worcester, England

Fresno Police Department
Fresno, CA

Frontier Aviation
Dutton, MT

Frontier Helicopters, Ltd.
Abbotsford, BC, Canada

Fuchs Helikopter
Schindellegi, Switzerland

Fugazy Air, Inc.
Smith Road
Ramapo Valley Airport
Spring Valley, NY 10977
☎914-352-8677
President/CEO: Richard Christifer
V.P. Marketing/Sales: Robert J. Gnecco
Director of Operations: John C. Agor
Operations: Air taxi/charter (US part 135),
Executive transport, Government contracting,
Patrol (power, pipeline, buried cable), Photography,
Sightseeing
Helicopters: **2**-206B,**1**-206L,**2**-B222,**1**-109A

Fuller Aviation Corp.
Sterling Juntion, MA

Fuller Aviation, Inc.
Indianapolis, IN

Fulton County Police Department
Atlanta, GA

Fumigacion Aerea Espanola S.A.
Sevilla, Spain

G & C Helicopter, Inc.
Elgin, OK

G & S Helicopters, Inc.
Miami, FL

G & S Transport Corporation
Pasay, Philippines

G G Helicopters, Inc.
Brookland, AR

G.T. Helicopters
Phoenix, AZ

GAC Aircraft Company
Savannah, GA

GSM Helicopters Ltd.
North Yorks, England

***GTS International, Ltd.**
635 S. Park Avenue
Buffalo, NY 14210
☎716-856-6500
President: Neil Lipke
Treasurer/Secretary: Eric Lipke
Operations: Executive transport
Helicopters: **1**-206B

Galaxy Aviation
Oklahoma City, OK

Gannett Co., Inc.
P.O. Box 17408
Washington, DC 20041
☎716-661-8992
Director of Flight Operations: John M. Gallagher
Pilot: Roland Hill
Pilot: Bruce Erion
Pilot: Nick Lawler
Operations: Corporate (US part 91, not for hire),
Electronic news gathering, Photography,
Traffic surveillance
Helicopters: **2**-206L,**2**-206B

Garlick Helicopters, Inc.
Hamilton, MT

Garrett Flying Service
Angleton, TX

Gary's Air Service
Cheney, WA

Gateway Helicopters
Monroeville, PA

Gem State Helicopters
Caldwell, ID

General Air Transportation
Cincinnati, OH

General Transportation Corp.
2111 Smithtown Avenue
Hangar D
Ronkonkoma, NY 11779
☎516-588-5321 ☐5102286505
Vice President: Guy Salvadore
Director of Flight Operations: Timothy L. Breen
Chief Pilot: Frank X. Cotroneo
Operations: Corporate (US part 91, not for hire)
Helicopters: **2**-S76A,**1**-332L

Genting BHD
Kuala Lumpur, Malaysia

Geo-Seis Helicopters, Inc.
2030 Airway Avenue
Fort Collins, CO 80524
☎303-484-3600 ☐9109309448
President: William T. Browder
Vice President, Operations: Edward Hennessy
Operations: Air taxi/charter (US part 135),
Construction, EMS/air ambulance, Exploration,
External cargo, Fire control/support,
Forestry, general, Government contracting,
Herding (stock & wildlife),
Law enforcement (for hire), Logging, Offshore,
Patrol (power, pipeline, buried cable),
Photography, Pollution detection/monitoring, Skiing
Helicopters: **2**-315B,**1**-316B,**2**-206B

Georgia Bureau of Investigation
Canton, GA

Georgia Deptartment of Natural Resource
Atlanta, GA

Georgia State Patrol
Atlanta, GA

German Air Rescue
Stuttgart, West Germany

Gibson Aviation, Inc.
Gaithersburg, MD

Gila River Industries, Inc.
Phoenix, AZ

Gilbert Aviation Industries
Visalia, CA

Jack Gillette Flying Service
Mesa, AZ

Givens Helicopters Inc.
Charlestown, WV

Glacier Helicopters
Smithers, BC, Canada

Glacier Helicopters Ltd.
Napier, New Zealand

Glanford Aviation Ltd.
Mount Hope, ON, Canada

Glendale Police Department
Glendale, CA

Gleneagle Helicopter Services
Edinburgh, Scotland

Global Rotors, Inc.
Los Angeles, CA

Globe Air, Inc.
Mesa, AZ

Glosair
Dorset, England

GoUp Helicopters
Orebro, Sweden

Godwin Sprayers, Inc.
Dunn, NC

Gold Coast Helicopters
North Miami, FL

Gold Nugget
San Antonio, TX

Golden Eagle Helicopters, Inc.
Roseburg, OR

Golden Nugget Transportation Corp.
Hangar 2 - North Avenue
Garden City, NY 11530
☎516-228-8840
Manager, Flight Department: Jonathan G. Watson
Operations: Corporate (US part 91, not for hire)
Helicopters: **2**-S76A

Golden State Aviation
East Cahon, CA

Golden West Aviation, Ltd.
Los Angeles, CA

Golfe Helicopter Service Ltd.
Sept Iles, PQ, Canada

Goodwin Bros Construction Co.
Crystal City, MN

Governmento del Estado de Hidalgo
Bachuca, Mexico

Government of Quebec
Ancienne-Lorette, PQ, Canada

Grand Canyon Helicopters
P.O. Box 455
Grand Canyon, AZ 86023
☎602-638-2410 ☐165-714
Vice President: James L. Kahan
Operations: Sightseeing, Skiing,
Government agency (not for hire),
Repair station (FAA certified),
Commuter air carrier (scheduled),
Air taxi/charter (US part 135), Photography
Helicopters: **2**-206L,**7**-206B,**1**-350D

Grand Helicopters
Yakima, WA

Grand Island Helicopters Inc.
Grand Island, NY

Manufacturer's key

HAI Code/Manufacturer		HAI Code/Manufacturer		HAI Code/Manufacturer	
12E4	Hiller	S62	Sikorsky	316B	Aerospatiale
H12D	Hiller	S64	Sikorsky	3160	Aerospatiale
H12E	Hiller	S70C	Sikorsky	318C	Aerospatiale
SL12	Soloy	S76A	Sikorsky	319B	Aerospatiale
UH12E	Soloy	S76B	Sikorsky	321J	Aerospatiale
R22	Robinson	B105	MBB	330J	Aerospatiale
F28A	Enstrom	B107	Boeing Vertol	330K	Aerospatiale
F28C	Enstrom	KV107	Kawasaki	330L	Aerospatiale
F28F	Enstrom	109A	Agusta	332C	Aerospatiale
WG30	Westland	BK117	Kawasaki	332J	Aerospatiale
BV44	Boeing Vertol	BK117	MBB	332L	Aerospatiale
47B	Bell	204B	Bell	341G	Aerospatiale
47D	Bell	205A	Bell	350B	Aerospatiale
47G	Bell	206A	Bell	350C	Aerospatiale
47G2	Bell	206B	Bell	350D	Aerospatiale
47G3	Bell	206L	Bell	355E	Aerospatiale
47G4	Bell	B212	Bell	355F	Aerospatiale
47G5	Bell	214B	Bell	360C	Aerospatiale
47H1	Bell	214ST	Bell	361	Aerospatiale
47J	Bell	B222	Bell	365	Aerospatiale
47J2	Bell	B234	Boeing Vertol	365N	Aerospatiale
47J3	Bell	269A	Hughes	B412	Bell
47K	Bell	280C	Enstrom	500A	Hughes
BV47	Boeing Vertol	280F	Enstrom	500C	Hughes
SL47	Soloy	280FX	Enstrom	500D	Hughes
S55T	Sikorsky	300B	Hughes	500E	Hughes
S58T	Sikorsky/California	300C	Hughes	1100	Fairchild
S61L	Sikorsky	313B	Aerospatiale	TCAT	Continental (Bell)
S61N	Sikorsky	315B	Aerospatiale	WASP	WASP

Grasberger, Austel & Co.
Oedheim, West Germany

Great Falls Helicopter Service Inc.
Great Falls, MT

Great Northern Air Expeditions
Lakeside, MT

Greatland Aviation Ltd.
Anchorage, AK

Green River Aviation Inc.
West Brattleboro, VT

Greenbelt Aviation Corporation
King City, CA

Greenlandair, Inc.
P.O. Box 1012
DK-3900, Godthaab, Greenland
☎24488 ☐90602
President: Claes Piper
V.P./Technical Division: Jorgen Oerstam
V.P./Route Division: Jorn Rosenberg
V.P./Charter Div.: Poul Lybbert
Operations: Air taxi/charter (US part 135),
Bank paper transportation,
Commuter air carrier (scheduled), Construction,
EMS/air ambulance, Executive transport, Exploration,
External cargo, Government contracting,
Herding (stock & wildlife),
Mechanic training school, Offshore,
Patrol (power, pipeline, buried cable), Photography,
Pollution detection/monitoring, Sightseeing
Helicopters: **4**-S61N,**5**-206B,**6**-B212,
1-355F

Greenville Aircraft Service Inc.
Greenville, MI

Greyhawk Helicopters
Rupert, ID

Griffin Ag-Air Ltd.
Palmerston Nort, New Zealand

Grogan Helicopters Inc.
Riverview, FL

Grote Aviation
Joseph, OR

Guilford Aviation Corporation
Amherst, NH

Gulf & Western Industries Inc.
Nashville, TN

Gulf Coast Helicopters, Inc.
4810 Comal Street
Pearland, TX 77581
☎713-485-7345
President/Owner: Edward Acuna, Sr.
Operations: Air carrier (US part 127),
Air taxi/charter (US part 135),
Bank paper transportation, Construction,
Electronic news gathering,
Executive transport, Exploration,
Government contracting,
Herding (stock & wildlife), Offshore,
Patrol (power, pipeline, buried cable),
Photography, Pilot training school,
Sightseeing, Traffic surveillance
Helicopters: **2**-206B

Gulf Helicopters Ltd.
Doha, Qatar

Gulf Helicopter Inc.
Mobile, AL

Gulf Helicopter Service Houston
Houston, TX

Gulfstream Helicopters Inc.
Opa Locka, FL

Gwinnett County Police Deptartment
Lawrenceville, GA

Gyrafrance
Mauguio, France

H & B Helicopter Service, Inc.
Hebron, NE

H.J. Aero Copters
Delta, BC, Canada

HCI Helicopters, Inc.
Kenner, LA

HELICSA-Helicopteros S.A.
Madrid, Spain

HELITEC-Helicopteros
Bogota, Colombia

Hampden County Sheriff
West Springfield, MA

Al Hamilton Contracting Co.
Road 1 Box 87
Woodland, PA 16881
☎814-857-7677
Pilot: Fred D. Ferlito
Operations: Corporate (US Part 91, not for hire)
Helicopters: **1**-206L

Hankyu Air Lines Co. Ltd
Osaka, Japan

Hans Hofmann Helicopter Service
Bellheim, West Germany

Harjedalens Fjallflyg AB
Tanndalen, Sweden

Harral Helicopter Inc.
Circleville, OH

Jack Harter Helicopters
Lihue, HI

Hartford Helicopters, Inc.
Brainard Airport
Hartford, CT 06114
☎203-522-1113
General Manager: Robert O. Brewster
Vice President, Marketing: Rick Nelson
Director of Maintenance: Donald Fisher
Operations: Air taxi/charter (US part 135),
Corporate (US part 91, not for hire)
Executive transport, Repair station (FAA certified)
Helicopters: **1**-S76A,**1**-206B,**1**-B222

Hawaii Pacific Helicopters Inc
Honolulu, HI

Hawker Pacific Pty. Ltd.
Yagoona, NSW, Australia

Hawker Pacific Pty. Ltd.
Kowloon, Hong Kong

Hawker Pacific Pty. Ltd.
Manila, Philippines

Hawker Pacific Pty. Ltd.
Seletar Airbase, Singapore

Hawkins & Powers Aviation Inc.
P.O. Box 391
Greybull, WY 82426
☎307-765-4482
President: Daniel J. Hawkins
Operations Manager: Bobby J. Hawkins
Chief Pilot: John D. Moberly
Operations: Agriculture,
Air taxi/charter (US part 135),
EMS/air ambulance, Executive transport,
Exploration, External cargo, Fire control/support,
Forestry, general, Government contracting,
Herding (stock & wildlife), Law enforcement (for hire),
Patrol (power, pipeline, buried cable),
Photography, Pollution detection/monitoring,
Repair station (FAA certified), Sightseeing
Helicopters: **3**-H12E,**3**-500D,**1**-500C,
1-206B,**1**-UH1B

Hawthorne Aviation, Inc.
Sandston, VA

Hearst Helicopter Service
Hearst, ON, Canada

Heart of England Helicopters Ltd.
Warwicks, England

Heavenly Valley Helicopters, Inc.
P.O. Box 2180
Stateline, NV 89449
☎916-541-1330
President & General Manager: William D. Killebre
Operations: Air taxi/charter (US part 135),
EMS/air ambulance, Construction,
Corporate (US part 91, not for hire),
Executive transport, Exploration,
External cargo, Forestry, general,
Herding (stock & wildlife), Photography,
Sightseeing, Skiing
Helicopters: **1**-500D

Hebron Aviation
Huron, SK, Canada

Helair Aero Taxi Ltda.
Barra da Tijuca, Brazil

Heli Afric
Port Gentil, Gabon

Heli Air Monaco
Monaco, France

Heli Air Transport
Vienna, Austria

Heli Club Air Forest
Torcy, France

Heli Flight GmbH & Co.
Waldsolms, West Germany

Heli Flight Service
Oostrozebeke, Belgium

Heli Inter
Dedex, France

Heli Leeds Ltd.
Leeds, Yorks, England

Heli Muster Pty Ltd
Sydney, NSW, Australia

Heli Neuchatel Ltd.
Neuchatel, Switzerland

Heli Orient (Pte) Ltd.
Manila, Philippines

Heli Picardia
Montdidier, France

Heli Pyrenees
Mirande, France

Heli Services
Frontenex, France

Heli Services (PTE) Ltd.
Building 193, East Camp
Seletar Airport
Singapore, 2879, Singapore
☎4815771 ☐ 25136
Managing Director: T.P. Lloyd
General Manager: J. Simler
Operations Manager: P.J. Latz
Engineering Manager: P.I. MacKenzie
Operations: Air taxi/charter (US part 135),
Construction, EMS/air ambulance,
Executive transport, Exploration,
External cargo, Government contracting,
Herding (stock & wildlife), Offshore,
Patrol (power, pipeline, buried cable),
Photography, Sightseeing
Helicopters: **1**-330J,**1**-B412,**5**-B212,
3-206B,**3**-315B,**1**-105D

Heli Star
Le Baule, France

Heli Time
Touques, France

Heli Trade Corporation
Eugene, OR

Heli Trans Pilatus AG
Emmenbrucke, Switzerland

Heli Union
4 Avenue de la Porte de Sevres
Paris 75015, France
☎01-554-9290 ☐260902
President: Charles de Rochechouart
General Manager: Christophe Marcilhacy
Marketing Manager: Dominique Lesourd
Operations Manager: Charles Schmitt
Technical Manager: Pierre Carnoy
Operations: Air taxi/charter (US part 135),
EMS/air ambulance, Construction,
Executive transport, Exploration,
External cargo, Forestry, general, Logging,
Mechanic training school, Offshore,
Patrol (power, pipeline, buried cable),
Photography, Pilot training school
Helicopters: **19**-313B,**12**-315B,**19**-316B,
7-341G,**2**-350B,**4**-355F,**14**-365C,
7-365N,**2**-S76A,**10**-330J

Heli Voyageur, Ltee.
Val d'Or, PQ, Canada

***Heli-Air Inc.**
125 Berrybrook
Broussard, LA 70518
☎318-837-3435 ☐5101010395
President: Gary J. Villiard
Vice President: David A. Brown
Operations: Air taxi/charter (US part 135),
EMS/air ambulance, Executive transport,
Exploration, External cargo, Offshore, Sightseeing
Helicopters: **1**-206B

* Indicates that complete membership application has been received and is now being processed in accordance with official HAI Bylaws.

Heli-Aust Pty. Ltd.
Bankstown, NSW, Australia

Heli-Cab Helicopter Services
San Antonio, TX

Heli-Chile Ltda.
Casilla 16-175
Santiago 09, Chile
☎224-3597 ☐340412
Chairman: Luis Silva de Balboa
President: Eduardo Silva de Balboa
Marketing Manager: Carlos Garcia
Operations Manager: Edward A. Jaeggi
Operations: Agriculture, EMS/air ambulance,
Executive transport, Exploration,
Fire control/support, Forestry, general,
Logging, Offshore,
Patrol (power, pipeline, buried cable),
Photography, Sightseeing, Skiing,
Electronic news gathering
Helicopters: 1-B105,1-500D,1-206B

Heli-Dyne Systems Inc.
P.O. Box 18967
Fort Worth, TX 76118
☎817-282-9804 ☐758619
President: Dee Tullos
Vice President, International Sales: Don Krause
Operations Manager: Tony Rumpel
General Manager: Timothy McKenna
Operations: EMS/air ambulance, Pilot training school,
Repair station (FAA certified)
Helicopters: 1-206B,1-300C

Heli-France
Paris, France

Heli-Holland BV
Emmer-Compascuum, The Neatherlands

Heli-Interventions
Tussy,Quentin, France

Heli-Jet Corporation
3830 Cross Street
Eugene, OR 97402
☎503-461-0310 ☐364419
President: Rod Kvamme
Chief Pilot: Tim Kelly
Director Of Maintenance: Tim McCartney
Marketing Manager: David Cann
Operations: Air taxi/charter (US part 135),
Construction, Exploration, External cargo,
Fire control/support, Forestry, general,
Government contracting, Repair station (FAA certified)
Helicopters: 6-205A

Heli-Linth AG
Mollis, Switzerland

Heli-Ouest
La Ferte Vidame, France

Heli-Rent
Copenhagen, Denmark

Heli-Service NV
Knokke Heist, Belgium

Heli-Trans Colombia S.A.
Cali, Colombia

Heli-Transport
Cannes, France

Heli-Max Ltee/Ltd.
Saint Maurice, PQ, Canada

Heliavia
Lisbon, Portugal

Helicap
Paris, France

Helicare Ltd.
Liverpool, England

Helicharter Corporation
Norristown, PA

Helico (Manchester) Ltd.
Lancs, England

Helicom Services Inc.
Salt Lake City, UT

Heliconsult, Ltd.
Grafschaft, West Germany

Helicopter Aerial Specialities
Oakland, CA

Helicopter Aerial Systems, Inc.
Fort Lauderdale, FL

Helicopter Air
Boynton Beach, FL

Helicopter Air Transport
Roanoke, VA

Helicopter Air Transport
GmbH & Co. KG
Innsbruck, Austria

Helicopter Air Transport Services
Altavista, VA

Helicopter Airways of Indiana, Inc.
Carmel, IN

Helicopter Airways Service Inc.
Detroit, MI

Helicopter Applicators, Inc.
Myersville, MD

Helicopter Associates, Inc.
Mesa, AZ

Helicopter Aviation
Decatur, AL

Helicopter Aviation Inc.
Boca Raton, FL

Helicopter Aviation Services
Via Orange, Australia

Helicopter Aviation Service Co., S.A.
Tehran, Iran

Helicopter Company Inc.
Denver, CO

Helicopter Farming Ltd.
Cambs, England

Helicopter Flights, Inc.
Palm Beach Gardens, FL

Helicopter Flite Services, Inc.
Charleston, WV

Helicopter Hire Ltd.
Essex, England

Helicopter Methods, Inc.
Salt Lake City, UT

Helicopter Minit-Men, Inc.
P.O. Box 21125
Columbus, OH 43221-0125
☎614-486-9309
President: Charles W. Thomas
Vice President: Victor J. Speroni
Operations Manager: James L. Murphy
Operations: Agriculture, External cargo,
Patrol (power, pipeline, buried cable),
Photography, Repair station (FAA certified)
Helicopters: 6-H12E,2-500C

Helicopter Mustering Pty. Ltd.
Queensland, Australia

**Helicopter Nacionales de
Colombia S.A.; "HELICOL"**
Avenida Eldorado No. 93-30, Piso 44
Bogota, Colombia
☎263-7504 ☐41225
General Manager: Francisco Pereira
Operations Manager: Captain: Mario Gomez
Chief Pilot: Captain: Luis E. Silva
Operations: Air taxi/charter (US part 135),
Patrol (power, pipeline, buried cable),
Photography, Repair station (FAA certified) Sightseeing
Helicopters: 3-204B,4-205A,4-206B, 1-206L

Helicopter Operators Pty. Ltd.
Mount Isa, Queensland, Australia

Helicopter Service Agrarflug
Ahlen GmbH Ahlen, West Germany

Helicopter Service Center Pty. Ltd.
Bankstown, NSW, Australia

Helicopter Service Wasserthal
GmbH Hamburg,
West Germany

Helicopter Services
Las Vegas, NV

Helicopter Services
Thonotosassa, FL

Helicopter Services (Fiji) Ltd
Nadi Airport, Fiji Islands

Helicopter Services (Pty) Ltd.
Durban, South Africa

Helicopter Services Co. Inc.
Yakima, WA

***Helicopter Services of
Jacksonville, Inc.**
P.O. Box 11727
Jacksonville, FL 32239-1727
☎904-641-7398
President: William C. Smith
Secretary: Judy A. Smith
Operations: Air taxi/charter (US part 135),
Electronic news gathering,
Executive transport, Government contracting,
Patrol (power, pipeline, buried cable),
Photography, Repair station (FAA certified) Sightseeing
Helicopters: 1-300C,1-500C

Helicopter Services, Inc.
Canyon Country, CA

Helicopter Services, Inc.
Fargo, ND

Helicopter Services Philippines
Manila, Philippines

Helicopter Support Systems Inc.
Tampa, FL

Helicopter Travel, Inc.
New York, NY

Helicopter-Service Wasserthal
Hamburg, Germany

Helicopteres Les Ailes
Saint Clet, PQ, Canada

Helicopteros Andes S.A.
Casilla 10134
Correo Central
Santiago, Chile
☎226-3373 ☐340302
President: Jorge Lathrop
Operations Manager: Jose M. Infante
Chief Pilot: Sergio Neale
Maintenance Manager: Ricardo Boisier
Operations: Agriculture,
Air taxi/charter (US part 135),
Construction, Exploration, External cargo,
Fire control/support, Forestry, general Offshore,
Patrol (power, pipeline, buried cable),
Photography, Sightseeing, Skiing
Helicopters: 3-500D,2-315B

Helicopteros de Guatemala
Avda. Hincapie 23-30, Zona 13
Aeropuerto La Aurora, Lado Este
Guatemala, Guatemala
☎318282 ☐5676
Chief Executive Officer: Rene Debroy
Operations Manager: Rolando Palacios
Chief Pilot: Ricardo Morataya
Safety Manager: Enrique Haessler
Operations: Agriculture,
Air taxi/charter (US part 135),
EMS/air ambulance, Executive transport,
Exploration, External cargo, Government contracting,
Patrol (power, pipeline, buried cable),
Photography, Pilot training school,
Repair station (FAA certified)
Helicopters: 5-206B,1-350B,1-47G5,
1-WASP

Helicopteros Marinos S.A.
Buenos Aires, Argentina

Helicopteros Trancontinental
Cali, Colombia

Helicopters (NZ), Ltd.
Nelson, New Zealand

Helicopters Enterprises, Inc.
Houston, TX

Helicopters Hawaii
Honolulu, HI

Helicopters Inc.
Louisville, KY

Helicopters Inc.
St. Louis, MO

Helicopters International Corp.
Miami, FL

Helicopters Ltd.
Flint, MI

Operators Management Seminar

Compliments to the management

Complement your industry experience with the new skills and knowledge gained at an HAI management seminar.

Broadly based work-study seminars provide helicopter managers with applied and practical skills in creative marketing, strategic planning for profit, improved operations management, enhanced operator economics, innovative financing, money management and micro computer use by managers.

Hundreds of managers, operators and owners have benefited from this program.

The Operators Management Seminar is held annually, just before the HAI Annual Meeting. The International Management Course — a second option — is conducted annually outside of the U.S.A.

For more information on HAI management seminars, write or call:

HAI Safety & Technical Department
1619 Duke Street
Alexandria, VA 22314-3406
Telephone: 703-683-4646. Telex: 89-615
Or return the information reply card on page 144.

Compliment your management.

Helicopter Association International

Helicopters Unlimited, Inc.
P.O. Box 4115
Oakland, CA 94614
☎415-632-9422 ☐172311
President: John J. McClelland
Vice President, Sales: Ross J. Fay
Secretary/Treasurer: Teri R. McClelland
Chief Pilot: Timothy A. Tatman
Operations: Air taxi/charter (US part 135),
Bank paper transportation, EMS/air ambulance,
Executive transport, Offshore
Helicopters: **2**-206L,**1**-500D,**5**-206B,
1-109A,**4**-F28A

Helicopters West, Inc.
P.O. Box 1083
Provo, UT 84603
☎801-377-6200
President: Craig F. Huntington
Operations: Air taxi/charter (US part 135),
Electronic news gathering, Executive transport,
Exploration, External cargo, Fire control/support,
Government contracting, Photography,
Skiing, Repair station (FAA certified)
Helicopters: **2**-206B,**1**-315B,**1**-316B

Helicor S.A.
Buenos Aires, Argentina

Helicraft de Mexico S.A. de C.V
Mexico, D.F., Mexico

Helicraft Ltee.
Saint Hubert, PQ, Canada

Helicrops, Ltd.
Oxford, England

Helifinn
Turku, Finland

Heliflight-West
Long Beach, CA

Heliflite Pty. Ltd.
Sydney, NSW, Australia

Helihire
Sydney, NSW, Australia

Helijet Aero Taxi Ltda.
Av. Erasmo Braga 255-12/13 Floors
Rio de Janeiro, Cep 20020, Brazil
☎021-224-7282 ☐02131050
Director: Roberto Lessa Bastos
Operations Manager: Nelson Filho Rino
Chief Pilot: Jose Augusto Duarte Morais
Maintenance Manager: Rinaldo João Mascherpa
Operations: External cargo, Offshore
Helicopters: **6**-206B,**8**-350B,**2**-330J

Helikopter Air-Transport GmbH
Fuerstenweg 180 Flughafen
A-6020, Innsbruck, Austria
☎81777 ☐038264
President: Fritz Feitl
Operations Manager: Leopold Baumann
Chief Pilot: Klaus Linke
Chief Engineer: Hellmut Sztatecsny
Operations: Air taxi/charter (US part 135),
Construction, EMS/air ambulance,
Executive transport, External cargo,
Fire control/support, Forestry, general, Logging,
Patrol (power, pipeline, buried cable),
Photography, Sightseeing, Skiing
Helicopters: **2**-315B,**2**-355F,**1**-350B,
1-B212,**1**-B205,**1**-369D

Helikopter Basel AG
Basel, Switzerland

Helikopter Service A/S
Elveveien 25 C
1324 Lysaker, Norway
☎02-590560 ☐76431
President: Emil Gamborg
Operations: Air taxi/charter (US part 135),
EMS/air ambulance, Exploration, External cargo,
Logging, Mechanic training school, Offshore,
Patrol (power, pipeline, buried cable),
Photography, Pilot training school,
Repair station (FAA certified), Sightseeing
Helicopters: **20**-S61N,**7**-332L,**8**-B212,
3-B234,**1**-204B,**1**-205A,**1**-214B

Helikopterikeskus Oy
Kouvala, Finland

Helikopteripalvelu
Helsinki-Malmi Airport
00700 Helsinki 70, Finland
☎90-372122
Managing Director: Dick Lindholm
Operations: Air taxi/charter (US part 135),
Construction, Electronic news gathering,
Executive transport, Exploration,
External cargo, Forestry, general,
Government contracting, Law enforcement (for hire),
Patrol (power, pipeline, buried cable),
Photography, Pilot training school,
Repair station (FAA certified), Sightseeing
Helicopters: **4**-206B,**1**-206L,**1**-360C,
2-R22H,**1**-300C

Helimares Ltda.
Huelen 10, Piso 3, Oficina A
Santiago, Chile
☎2514185 ☐340346
President: Alberto Osorio Lagreze
Operations Manager: Patricio Matamala
Operations: Air taxi/charter (US part 135),
Corporate (US part 91, not for hire),
Executive transport, Exploration,
External cargo, Fire control/support,
Forestry, general, Offshore,
Patrol (power, pipeline, buried cable),

Helimax Ltee.
Saint Maurice, PQ, Canada

Helimuster Pty. Ltd.
Revesky North, NSW, Australia

Heliocean
Noumea, New Caledonia

Helipad Aviation, Inc.
Dimensions Plus Helicopters
P.O. Box 1563
Ukiah, CA 95482-1563
☎707-468-5510
President of Marketing & Sales: Timothy W. Morgan
Executive Vice President: Beverly B. Morgan
Chief Pilot: John H. Dewitt
Operations: Air taxi/charter (US part 135),
Construction, Corporate (US part 91, not for hire),
Electronic news gathering, EMS/air ambulance,
Executive transport, Exploration,
External cargo, Fire control/support,
Forestry, general, Government contracting,
Herding (stock & wildlife),
Law enforcement (for hire), Offshore,
Patrol (power, pipeline, buried cable),
Photography, Sightseeing, Skiing
Helicopters: **1**-500C,**1**-R22/,**1**-500D,
2-206B

Helipad Aviation, Inc.
Alaska Operation
Ketchikan International Airport
P.O. Box 9573
Ketchikan, AK 99901
☎907-225-1794
Director of Maintenanca/Manager: Douglas G. Vetch
Operations: Air taxi/charter (US part 135),
Law enforcement (for hire), Offshore,
Forestry, general, Government contracting
Helicopters: **2**-206B,**1**-500D,**1**-500C

Heliquip (PTY.) Ltd.
P.O. Box 18011
Rand Airport
Transvaal 1419, South Africa
☎011-827-8935 ☐4-29800
President: P. Piggott
Operations Manager: T.M. Thomas
Chief Pilot: A. Klootwyk
Technical Manager: W.J. McMurdo
Operations: Agriculture, Air Carrier (US part 127),
Air taxi/charter (US part 135),
Executive transport, Exploration,
External cargo, Herding (stock & wildlife),
Logging, Patrol (power, pipeline, buried cable),
Photography, Pilot training school,
Pollution detection/monitoring,
Air carrier (US part 127)
Helicopters: **3**-350B,**1**-300C,**1**-341G,
2-206B,**3**-12E4

Heliscot Ltd.
Inverness, Scotland

Helisecours
Brussels, Belgium

Heliservice-Servicos
Especializados de Helicopteros Ltda.
Rua Bela Cintra, No.2093
Sao Paulo, 01415, Brazil
☎011-853-4610 ☐01153248
President: Philippe Rossi
Operations: Air taxi/charter (US part 135),
Executive transport, Government contracting,
Photography, Sightseeing
Helicopters: **1**-206B

Heliservices (Hong Kong) Ltd.
Hong Kong, Hong Kong

Heliservices, Inc.
Meza, AZ

Heliservicio Campeche
S.A. de C.V.
Citlaltepetl No. 27
Mexico, D.F., 06100, Mexico
☎905-553-6006
Administrative Director: Juan Gonzalez
Vice President, Marketing: Carlos Zarate
Director of Administration: Juan A. Gonzalez
Operations: Air carrier (US part 127),
Executive transport, Exploration,
External cargo Offshore, Photography,
Repair station (FAA certified)
Helicopters: **8**-B212,**3**-206B

Helisport, C.A.
Caracas,, Venezuela

Helispray Ltd.
Huntingdon, Cambs, England

Helistream, Inc.
Santa Ana, CA

Heliswift Services S.A.
Ras al Khaimah, United Arab Emirates

Heliswiss
Swiss Helicopter Ltd.
Berne-Airport
Belp 3123, Switzerland
☎031-81-3311 ☐32540
President: H.P. Staffelbach
Commercial Manager: Walter Demuth
Managing Director: K. Heinz
Operations: Agriculture, EMS/air ambulance,
Construction, Executive transport,
Exploration, External cargo,
Fire control/support, Forestry, general,
Government contracting,
Law enforcement (for hire), Logging,
Mechanic training school, Offshore,
Patrol (power, pipeline, buried cable),
Photography, Pilot training school,
Repair station (FAA certified), Sightseeing,
Skiing, Traffic surveillance
Helicopters: **1**-B412,**1**-214B,**0**-204B,
1-205A,**8**-315B,**4**-206B,**3**-350B,**2**-SL47

Helitac Aviation, Inc.
1910 W. Sunset Boulevard
Suite 900
Los Angeles, CA 90026
☎213-483-6898
Operations Manager: John W. Bluff
General Manager: M. V. Dreesman
Operations: Air taxi/charter (US part 135),
Bank paper transportation, Electronic news gathering,
Executive transport, Photography
Helicopters: **1**-206B,**1**-500C,**1**-206L

Helitac Ltd.
Kenora, ON, Canada

Helitaxi Ltda.
Bogata, Colombia

Helithon
Concarneau, France

Helitourist A/S
Voss, Norway

Helitrade, Ltd.
Belp, Switzerland

Helitrans
San Pedro, CA

Helitron Corporation
P.O. Box 7771
Amarillo, TX 79114
☎806-374-1922
President: Julian Lee Bivins III
Vice President: Gene Vaughn Morrison
Chief Pilot: Calum D. Falconer
Director of Maintenance: Roy L. Hutto
Operations: Air taxi/charter (US part 135),
Executive transport, Exploration
Herding (stock & wildlife),
Patrol (power, pipeline, buried cable),
Photography, Pilot training school,
Sightseeing, Electronic news gathering
Helicopters: **1**-500D

Helivalle Ltda.
Carrerra 11 No. 86-60
Oficina 202
Bogota, Colombia
☎257-0635 ☐45167
Operations Manager: Carlos F. Espitia Lloreda
President: Miguel R. Espitia Espitia
Chief Pilot: Jaime Pinzon
Miguel J. Espitia Lloreda
Operations: Agriculture, Air carrier (US part 127),
Air taxi/charter (US part 135),
Bank paper transportation,
Executive transport, Exploration,
External cargo, Government contracting,
Offshore, Photography
Helicopters: **4**-206B,**5**-47G5

Heliwest Saffig Heliport,
West Germany

Heliwest, Ltd.
Lakewood, CO

Heliwork, Ltd.
Andover, Hants, England

Walter E. Heller & Co.
Chicago, IL

Helo Transport Service Inc.
New Bern, NC

Helo-Wood Helicopters Inc.
Tremonton, UT

Helog, Ltd.
Kussnacht, Switzerland

Hemet Exploration S.A.
Colomiers, France

Henderson Aviation Co.
Eugene, OR

F.D. Henderson Flying Service
Artesia Wells, TX

Hendrickson Flying Service
Rochelle, IL

Henrico County Police Dept.
Richmond, VA

Hermann Hospital-Life Flight
1203 Ross Sterling
Houston, TX 77030
☎713-797-4014
Director of Operations: Bill LaChance
Associate Administrator: Ron Stutes
Chief Pilot: Steve Kinnaman
Operations: EMS/air ambulance
Helicopters: **5**-355F

Hernando County Sheriff
Brooksville, FL

Houssier Air Service Corp.
9900 Porter Road
Niagara Falls, NY 14304
☎716-297-4497
President: Richard A. Hammond
Director of Operations: Michael J. Knoll
Operations: Air taxi/charter (US part 135),
Electronic news gathering, EMS/air ambulance,
Executive transport, Law enforcement (for hire),
Patrol (power, pipeline, buried cable),
Photography, Pilot training school,
Pollution detection/monitoring,
Repair station (FAA certified), Sightseeing,
Traffic surveillance
Helicopters: **3**-47G5,**1**-300C,**1**-206B

Hi Lift Inc.
West Allis, WI

Hi-Line Helicopters, Inc.
Humble, TX

Safety Seminar

The safe combination ...

The safe combination for helicopter operations is proper flight crew training, good operations and maintenance practices, and the HAI Safety Seminar.

Designed for mid-level management and pilots, these seminars provide a forum for problem solving. The seminar covers a wide variety of subjects that are important to safety management and accident prevention.

The safety seminars are conducted regionally, and much of the material is tailored to problems of specific interest within each region.

For more information, contact:
HAI Safety & Technical Department
1619 Duke Street
Alexandria, VA 22314-3406
Telephone: 703-683-4646. Telex: 89-615
Or return the information reply card on page 144.

Invest in a safe combination.

Helicopter Association International

HiLine Helicopters Inc.
47225 Sauk Prairie Road
Darrington, WA 98241
☎206-436-1302
President: Anthony B. Reece
Operations: Air taxi/charter (US part 135),
EMS/air ambulance, External cargo,
Fire control/support,
Forestry/general, Government contracting,
Logging, Sightseeing
Helicopters: **1**-500D

Hibernia National Bank
New Orleans, LA

Hidden Valley Helicopters
Rosamond, CA

High Country Helicopters
Lafayette, LA

High Range Aviation, Inc.
Gooding, ID

Highland Helicopters Ltd.
Richmond, BC, Canada

Highland Police Department
Highland, IN

Hilco Aviation, Inc.
Odessa, TX

Dick Hill Helicopters
& Flying Service, Inc.
P.O. Box 10603
Springfield, MO 65808
☎417-485-3474
President: Dick Hill
Vice President: Rik Hill
Secretary-Treasurer: Marlene J. Hill
Operations: Herding (stock & wildlife), Photography,
Pilot training school,
Sightseeing, Traffic Surveillance
Helicopters: **1**-47D,**2**-47G,

Hillcrest Aircraft Co.
Lewistown, ID

Hillsboro County Sheriffs Department
Tampa, FL

Hillsboro Helicopters Inc.
3301A N.E. Cornell Road
Hillsboro, OR 97124-6380
☎503-648-2831
President: Jerry V. Trimble
General Manager/V.P. Marketing: Michael K. Moffitt
V.P. Public Relations: Scott A. Easton
Operations: Air taxi/charter (US part 135),
Electronic news gathering, External cargo,
Forestry, general, government contracting,
Photography, Pilot training school, Sightseeing,
Traffic surveillance,
Helicopters: **5**-R22/,**1**-206B,**1**-500D,
1-12E4

Hindes Helicopters Inc.
Charlotte, TX

Hodgdon, W. Warner
1746 Spruce Street
Riverside, CA 92507
☎714-689-7043
Director of Flight Operations: Charles K. Phillip
Operations: Corporate (US part 91, not for hire)
Helicopters: **1**-341G -

Hoffman Construction Co.
Portland, OR

Holder Rotor Wing Service Co.
Pocahontas, IA

Holt Helicopters Inc.
Uvalde, TX

Honolulu Fire Department
Honolulu, Oahu, HI

Honolulu Police Department
Honolulu, HI

Hookway Aviation Ltd.
Hobart, Tasmania, Australia

Hopedale Police Department
Hopedale, IL

Horizon Aviation Ltd.
Aurora, OR

Horizon Helicopter, Inc.
Tarpon Springs, FL

***Horizon Helicopters, Inc.**
P.O. Box 7000
Kamloops, BC, V2C 6E1, Canada
☎604-554-3434 ☐048-8417
President: A. Giesbrecht
General Manager: Gary J. Clark
Chief Engineer: Richard Dickie
Operations: Agriculture, Air taxi/charter (US part 135),
Construction, EMS/air ambulance, Exploration,
External cargo, Fire control/support,
Government contracting,
Patrol (power, pipeline, buried cable)
Helicopters: **3**-206B

Hornbill Skyways SDN. BHD.
Kuching, Sarawak, Malaysia

Horsham Valley Airways, Inc.
451 Caredean Drive
Horsham, PA 19044
☎215-674-2100
President: Frank D. Strassacker
Director of Maintenance: Thomas J. Sullivan
Chief Pilot: Edward W. Malrey
Operations: Air taxi/charter (US part 135),
Bank paper transportation, EMS/air ambulance,
Executive transport, Law enforcement (for hire),
Patrol (power, pipeline, buried cable),
Photography, Pilot training school,
Repair station (FAA certified), Sightseeing
Helicopters: **1**-B222,**2**-300C,**3**-206B,
1-206L

Houston Helicopters, Inc.
Pearland, TX

Houston Pipe Line Company
P.O. Box 1188
Houston, TX 77001
☎713-654-6828 ☐910 881 6385
President: Mel Sweatman
Vice President of Operations: Walker Sanders
Administrative Manager: Barney L. Brasher
Pilot: Randy Hawley
Operations: Corporate (US part 91, not for hire)
Helicopters: **1**-206B

Houston Police Department
Helicopter Division
Hobby Airport
8402 Larson Street
Houston, TX 7/061
☎713-641-0281
Commanding Officer: Capt. E.E. Milam
Administrative Officer: Sgt. Richard M. Wilson
Operations: Law enforcement (not for hire)
Helicopters: **11**-300C,**5**-500C

Hughes Aircraft Company
Van Nuys, CA

Huisson Aviation Ltd.
Timmins, ON, Canada

Hummingbird Inc.
Valley Center, CA

Huntington Beach Police Department
Huntington Beach, CA

Hurricane Helicopters Inc.
Coconut Grove, FL

Hutson's Ag Service Inc.
Murray, KY

Hy-plains Helicopters Inc.
Sublette, KS

Hydro-Quebec
75 W. Dorchester
Montreal, PQ, H2Z 1A4, Canada
☎514-289-2858 ☐05561047
Conseiller Transport Aerien: Pierre Pourciel
Operations: Air taxi/charter (US part 135),
Corporate (US part 91, not for hire),
Executive transport, Government contracting,
Government agency (not for hire)
Helicopters: **6**-206B,**4**-318C

Hyr-Flyg AB
Ljungsbro, Sweden

I.B.M. Corp.
Dutchess County Airport
Wappingers Falls, NY 12590
☎914-463-4400
Chief Pilot: Pete Griffith
Operations: Corporate (US part 91, not for hire),
Executive transport
Helicopters: **1**-B222

Idaho Helicopters, Inc.
2471 Commerce Avenue
Boise, ID 83705
☎208-344-4361
President: Ray J. Franz
Chief Pilot: Lavern Haney
Operations: Agriculture, Air taxi/charter (US part 135),
Construction, EMS/air ambulance, Exploration,
External cargo, Fire control/support,
Forestry, general, Government contracting,
Herding (stock & wildlife),
Patrol (power, pipeline, buried cable),
Photography, Sightseeing
Helicopters: **2**-206L,**3**-206B,**1**-315B,
1-350D,**2**-UH12E

Ideal Helicopter Service Inc.
Sullivan, WI

Ikaros Ltd.
Athens, Greece

Illinois Department of Transportation
Division of Aeronautics
Capital Airport
Springfield, IL 62706
☎217-753-4400
Chief, Avn. Education & Safety: Richard M. Ware
Chief Pilot: S. Duane Moore
Director: Robert L. Donahue
Operations: EMS/air ambulance,
Corporate (US part 91, not for hire),
Executive transport,
Government agency (not for hire),
Law enforcement (not for hire)
Helicopters: **2**-206B,**1**-206L,**1**-S76A

Illinois State Police
Springfield, IL

Illinois State Toll Highway Authority
2001 West 22nd Street
Oakbrook, IL 60521
☎312-654-2200
Chief Pilot: Robert M. Gaylord
Operations: Government agency (not for hire),
Law enforcement (not for hire), Photography,
Traffic surveillance
Helicopters: **1**-206B

Imperial County Sheriff
El Centro, CA

Imperial Industries, Inc.
Miami Lakes, FL

Imperial International, Inc.
South St. Paul, MN

Industrial Air Charter Service Inc.
Bradenton, FL

Indian River Helicopter
Fort Pierce, FL

Indiana State Police
Indianapolis, IN

Indonesia Air Transport P.T.
P.O. Box 2485
Jakarta, Indonesia
☎418190 ☐46404
Managing Director: Indra Rukmana
General Manager: Peter van Veen
Director: R. Soekardjono S.
Operations Manager: G. Tschernitz
Operations: Air taxi/charter (US part 135),
Construction, EMS/air ambulance,
Executive transport, Exploration,
External cargo, Forestry, general,
Government contracting, Offshore,
Patrol (power, pipeline, buried cable)
Helicopters: **1**-318C,**4**-316B,**2**-365C

Industrial Aviation Services
Salem, OR

---

* Indicates that complete membership application has been received and is now being processed in accordance with official HAI Bylaws.

We would like to invite you to invest in our past

and in our future.

Help us build a strong foundation by becoming a founding member of The Helicopter Foundation International.

The helicopter industry has been advancing at such a rapid pace over the years that we have almost lost sight of our exciting history ... the role of the "Unique Machine" in our society.

In 1983, the Helicopter Foundation International was created to become the caretaker of the helicopter industry's illustrious history.

To date, HFI has collected more than 900 historic helicopter models, 20,000 documents, rare books and other memorabilia documenting the history and growth of the helicopter industry. This extensive collection will serve as a research center for students and other enthusiasts. The collection will continue to expand as materials become available or as the exciting history of the helicopter unfolds.

HFI needs your support.

Help us ensure a strong future for your foundation, become an individual or corporate founding member. Your contribution is tax deductible*. Donations in the form of historic documents, models, periodicals and memorabilia are also greatly appreciated.

HAI Chairman Charles W. Johnson (left) accepts a model of the Boeing Vertol 360, and a picture of the Boeing Vertol H-16, Navy HUP and H-21 from Brian R. Woodcock (center) and Sy Berdux (right), of Boeing Vertol. Johnson accepted these gifts for the Helicopter Foundation International.

Helicopter Foundation International

1619 Duke Street Alexandria, VA 22314-3406
Telephone 703-683-4646

For information return the postpaid reply card on page 144 or contact John Slattery, Curator

---

* HFI is recognized by the U.S. Internal Revenue Service as a 501(c)(3) non-profit, publicly funded, tax-exempt organization. Consult your tax advisor for applicability to your situation.

Industrial Helicopters, Inc.
P.O. Box 90210
Lafayette, LA 70509-0210
☎318-233-3356
President: J. Oran Richard
Operations Manager: Charles A. Phipps
Chief Pilot: Richard V. Wallace
Director of Maintenance: Michael K. Guidry
Operations: Agriculture,
Air taxi/charter (US part 135), Construction,
Executive transport, Exploration,
External cargo, Government contracting,
Herding (stock & wildlife), Offshore,
Patrol (power, pipeline, buried cable),
Photography, Repair station (FAA certified),
Sightseeing
Helicopters: **7**-206B,**3**-206L,**2**-SL47,
1-350D

Infinity Aviation, Inc.
P.O. Box 757
Lincoln, CA 95648
☎916-645-8117 ☐467716
President: Richard L. Fleischer
Vice President/Marketing: Robin C. Fleischer
Service Manager: Jerry McKown
Parts Manager: Ted Nofer
Operations: Corporate (US part 91, not for hire),
Repair station (FAA certified)
Helicopters: **1**-206B,**2**-500D

Inland Aero Service, Inc.
16 Union Street
Batavia, NY 14020
☎716-343-4471
President: F. Robert Bialkowski
Operations: Agriculture
Helicopters: **2**-B47G,**1**-TCAT

Inland Air Lines Inc.
North Myrtle Beach, SC

Inland Aviation Inc.
Ephrata, WA

Inter Mountain Helicopter Inc.
Arnold, CA

Interair Services, Inc.
Clearwater, FL

Intercontinental Aviation Inc.
Clearwater, FL

International Air Support Inc.
San Antonio, TX

International Air Transport Incorporated
2404 Merrill Field Drive
Anchorage, AK 99501
☎907-272-5425 ☐26485
President: J. Haugen
Operations: Agriculture, Air taxi/charter (US part 135),
Exploration, External cargo,
Fire control/support,
Forestry, general, Government contracting,
Herding (stock & wildlife), Offshore,
Patrol (power, pipeline, buried cable),
Repair station (FAA certified), Skiing
Helicopters: **4**-341G,**2**-500C

International Jet Aviation Service
Englewood, CO

International Union of Operating Engineers Local No.138
P.O. Box 206, Gazza Bldg.
Farmingdale, NY 11735
☎516-694-2480
Vice President: Gerald J. Quill
Operations: EMS/air ambulance,
Corporate (US part 91, not for hire),
Construction, Offshore
Helicopters: **1**-206B

Interprovincial Helicopters
Saint John, NB, Canada

Interstate Helicopters, Inc.
Oklahoma City, OK

Irish Helicopters, Ltd.
Westpoint Hangar
Dublin Airport
Dublin, Ireland
☎376473 ☐24725
Director/General Manager: Capt. F. Laycock
Operations Manager: Allan V. Mutton
Engineering Manager: Michael Fitzgerald
Commercial Manager: Frederick W. Balcombe
Operations: Air carrier (US part 127),
Air taxi/charter (US part 135), Construction,
Executive transport, External cargo, Offshore,
Patrol (power, pipeline, buried cable),
Photography, Private owners, Sightseeing
Helicopters: **1**-B105D,**2**-206B,**2**-B212,
2-S61N

Irish Helicopters, Ltd.
Cork, Ireland

Iroquois Helicopters, Ltd.
Ottawa, ON, Canada

Island Aviation Inc.
Port Clinton, OH

Island Express, Inc.
P.O. Box 20001
Long Beach, CA 90801
☎213-491-5550
President: J.J. Feinberg
Chief Pilot/Director of Operations: John E. Moore
Operations: Air taxi/charter (US part 135),
Executive transport, Photography, Sightseeing
Helicopters: **1**-206L,**1**-206B

Island Helicopter Corporation
North Avenue
Garden City, NY 11530
☎516-228-9355 ☐146375
Chairman: Fredric Fine
President: Emil V. Cianciulli
Vice President, Finance: Peter McGann
Operations: Agriculture,
Air taxi/charter (US part 135),
Bank paper transportation,
Commuter air carrier (scheduled),
Electronic news gathering, EMS/air ambulance,
Executive transport, Photography,
Pilot training school,
Repair station (FAA certified), Sightseeing
Helicopters: **6**-206L,**2**-206B,**4**-355F,
2-350D,**8**-360C,**4**-S58T,**1**-109A

Island Helicopter Inc.
Dover, DE

Island Helicopters Corp.
Fort Myers, FL

Island Helicopters Kauai
Lihue, Kauai, HI

Islandair Helicopters
Brisbane, Queensland, Australia

***J & J Maintenance Inc.**
1924 S. First Avenue
Austin, TX 78704
☎512-444-7271
Vice President: Johnny Voudouris
Sharron Voudouris
Operations: Government contracting, Private owners
Helicopters: **1**-300C

J C Helicopter Inc.
Faulkton, SD

J M H Associates, Inc.
Peerland, TX

J. S. & Son Pty. Ltd.
Budgewoi, NSW, Australia

J.C. Helicopters, Inc.
Kissimmee, FL

JSJ Aviation Inc.
Mesa, AZ

JTL Helikopterflyg AB
Arlov, Sweden

S.W. Jack Drilling Co.
Indiana, PA

Jackson Police Department
Jackson, MS

Jaindl Aviation Inc.
Crefield, PA

James Aviation Ltd.
Hamilton, New Zealand

Jamtlands Aero AB
Ostersund, Sweden

Japan Helicopter K.K.
Tokyo, Japan

Jay Harmon Aerial Spraying
Lake City, AR

Jayrow Helicopters Pty. Ltd.
P.O. Box 46
Mentone
Victoria, 3194, Australia
☎587-1833 ☐AA33019
Managing Director: Lindsay Rose
General Manager: Cliff Dohle
Chief Pilot: Peter Clemence
Operations: Air taxi/charter (US part 135),
Construction, Electronic news gathering,
Exploration, External cargo,
Fire control/support, Forestry, general,
Government contracting,
Patrol (power, pipeline, buried cable),
Photography, Pilot training school
Helicopters: **7**-206B,**2**-350B

Jedna Helicopter Co. Inc.
Woodland Hills, CA

Jeffco Aviation Ltd.
Swan Hills, AB, Canada

Jefferson County Police Department
Louisville, KY

Jefferson County Sheriff
Birmingham, AL

Jefferson County Sheriff
Broomfield, CO

Jeffersonville Indiana Police Department
Jeffersonville, IN

Jensen & Grove, Inc.
Hoquiam, WA

Jet 66
Houston, TX

Jet America
New Orleans, LA

Jet East, Inc.
Dallas, TX

Jet Helicopters Inc.
Ingleside, TX

Jet Jop Helicopters Inc.
Van Nuys, CA

Jet Ranger Helicopter Service Inc.
Livonia, MI

Jet South, Inc.
Fort Myers, FL

Jetair Inc.
Waitfield, VT

Jetcopters II, Inc.
Honolulu, Oahu, HI

Jetcopters, Incorporated
16303 Waterman Drive
Van Nuys, CA 91406
☎818-902-0800
President: Peter McKernan, Sr.
Executive Vice President: Peter McKernan, Jr.
Vice President/Operations: Kevin La Rosa
Operations: Air taxi/charter (US part 135),
Bank paper transportation, Construction,
Executive transport, External cargo,
Photography, Pilot training school,
Repair station (FAA certified), Sightseeing
Helicopters: **7**-206B,**7**-206L,**1**-B222,
2-500D,**3**-300C,**1**-S76A,**1**-355F

Jobe Helicopter
Redmond, WA

Johns Manville Corporation
Denver, CO

A.R. Johnson Helicopters
Sitka, AK

Ben Johnson Helicopters
Joseph, OR

---

* Indicates that complete membership application has been received and is now being processed in accordance with official HAI Bylaws.

S.C Johnson & Son, Inc.
Aviation Section
2925 Golf Avenue
Racine, WI 53404
☎414-631-2707 ☐264429
Aviation Manager: S.K. Kazarian
Helicopter Captain: Robert Root
Operations: Corporate (US part 91, not for hire)
Helicopters: **1**-S76A

Jungle Aviation & Radio
Waxhaw, NC

K & W Aero Inc.
Port Monmouth, NJ

K Air
Latrobe, PA

KCRA TV - Kelly Broadcasting
310 10th Street
Sacramento, CA 95814
☎916-444-7300
President: Jon Kelly
Operations Manager: Don Saraceno
Chief Pilot: Daniel Shively
Operations: Corporate (US part 91, not for hire),
Electronic news gathering, Photography,
Traffic surveillance
Helicopters: **1**-206B

KLM Helikopters B.V.
P.O. Box 7700
Schipol- Oost, 1117 ZL, The Netherlands
☎020-491339 ☐14233
Managing Director: Frans Bokma
Marketing Manager: W.J. van der Woude
L.M.: F.J. Schaper
F.M.: F. Lindeman
Operations: Construction, EMS/air ambulance,
Executive transport, External cargo,
Government contracting, Offshore, Photography,
Pollution detection/monitoring,
Repair station (FAA certified), Sightseeing
Helicopters: **7**-S61N,**4**-S76A

KMPC Airwatch
Los Angeles, CA

KPNX Television, Inc.
1101 N. Central Avenue
Phoenix, AZ 85001
☎602-257-1212
Chief Pilot: Jerry Foster

KSL Television
Broadcast House
5 Triad Center
Salt Lake City, UT 84180
☎801-575-5555
Chief Pilot: James B. Dirker
Operations: Corporate (US part 91, not for hire),
Photography, Traffic surveillance,
Electronic news gathering
Helicopters: **1**-206B

KTSP TV, Inc. (Channel 10)
Phoenix, AZ

Kagoshima Kokusai Kotsu Co. Ltd.
Kagoshima, Japan

John Kamburoff Aerial Spray, Inc.
Poston, AZ

Kansas City Police Department
Kansas City, MO

Kansas Highway Patrol
Topeka, KS

Kenai Air Alaska, Inc.
155 Granite Point Court
Kenai, AK 99611-3921
☎907-283-7561 ☐26507
President: Craig R. Lofstedt
Operations: Air Taxi/Charter (US part 135)
EMS/air ambulance, Exploration,
External cargo, Executive transport,
Fire control/support, Government contracting,
Herding (stock & wildlife), Offshore,
Repair station (FAA certified)
Helicopters: **2**-B212,**2**-205A,**1**-206L,
8-206B,**1**-500E

Kenai Air Hawaii, Inc.
Honolulu, HI

Kennedy Air Service
Valdez, AK

Kenting Helicopters
Calgary, AB, Canada

Kentucky Helicopters, Inc.
Lexington, KY

Kern County Sheriff
Bakersfield, CA

Ketchikan Air Service Inc.
Ketchikan, AK

Key Airlines Inc.
Salt Lake City, UT

Keystone Helicopter Services
1420 Phoenixville Pike
West Chester, PA 19380
☎215-644-4430 ☐5106685061
President: Peter Wright, Sr.
Director of Marketing/Sales: Mark McCorkle
Vice President/General Manager: Michael D'Aries
Vice President/Treasurer: Peter Wright, Jr.
Operations: Air taxi/charter (US part 135),
Bank paper transportation,
Corporate (US part 91, not for hire),
EMS/air ambulance, Electronic news gathering,
Executive transport, Government contracting,
Offshore, Patrol (power, pipeline, buried cable),
Repair station (FAA certified)
Helicopters: **2**-206B,**1**-206L,**1**-B105,
4-S76A,**1**-BK117,**1**-B222,**1**-109A,
1-500E

Keystone Helicopter Services
P.O. Box 21783
Fort Lauderdale, FL 33335
☎305-326-7199
Service & Sales Representative: Ceasar Charris
Operations: Exploration, Offshore,
Repair station (FAA certified), Government contracting

Kidd Creek Mines, Ltd.
Aviation Department
P.O. Box 580, Timmins Airport
Timmins, ON, P4N 7G1, Canada
☎705-264-1542
President: Donald C. Lowe
Manager/Aviation Department: S. Wayne Kidd
Operations: Corporate (US part 91, not for hire),
Exploration, External cargo, Executive transport
Helicopters: **1**-206B

Kilroe Helicopters Manchester
Wilmslow, Cheshire, England

Kimberley Helicopters
Kununurra, WA, Australia

Kirby N.Y. Realty Company
Star Jet Corporation
Hangar C
Suffolk County Airport
West Hampton Beach, NY 11978
☎516-288-4053
Chief of Helicopter Operations: Elias Ullman
Chief of Maintenance: Mike J. Waters
Operations: Private owners
Helicopters: **1**-206L

Kitti Hawk Helicopters Inc.
Hillsboro, OR

Kittner Aircraft and Repair
Ellenville, NY

Kitzmiller Enterprises, Inc.
Mattawan, MI

Kiwi Kopters Air Service
Coalinga, CA

Kjerstad Helicopters
Jackson, WY

Klang & Ohlund Hkp-Flyg, HB
Stockholm, Sweden

***Knight Aviation Services, Inc.**
7000 W. Camino Real
Boca Raton, FL 33433
☎305-734-4199
President: William L. Knight
Vice President/Treasurer: Kevin M. Carroll
Director of Operations/Chief pilot: Ray White
Operations: Air carrier (US part 127),
Air taxi/charter (US part 135),
Corporate (part 91, not for hire),
Electronic news gathering, Executive transport,
Exploration, Forestry/general, Photography, Sightseeing
Helicopters: **1**-206L

Knoell Bros. Construction, Inc.
P.O. Box 21287
2401 S. 24th Street
Phoenix, AZ 85036
☎602-275-7429
Chairman of the Board: Frank E. Knoell, Jr.
President: Thomas E. Knoell
Chief Pilot: Paul E. Uster
Chief of Maintenance: Larry Thomas
Operations: Air taxi/charter (US part 135),
Corporate (US part 91, not for hire), Executive transport
Helicopters: **1**-B222

Knutson Helicopters
Tioga, ND

Kodiak Western Alaska Airlines
Anchorage, AK

Koester Aviation Inc.
Evansville, IN

Koller Corp.
Weston, ID

Kona Helicopters, Inc.
Kailua-Kona, HI

Kool CBS Radio & Television
Phoenix, AZ

Kootenai Pass Helicopters, Inc.
Libby, MT

Kopter Kraft
El Cajon, CA

Korean Air Lines
Seoul, Korea

Kovisco
Harrismith, South Africa

Kruger Helicopter Service
Lakeside, MT

Kumpulan Guthrie Sendirian Berhad
Wisma Guthrie,
P.O. Box 12156
Kuala Lumpur, Malaysia
☎2541644 ☐MA 30346
Operations Manager: H.M. McMichael
Chief Pilot: Nasir Ma Lee
Operations: Agriculture, Executive transport
Helicopters: **1**-206L

L & M Helicopters Inc.
Enterprise, AL

L & S Helicopters Inc.
Eunice, LA

L.P.W. Helicopter Service, Inc.
Belleville, MI

L-T-D Helicopters
Baden Baden, West Germany

Lacy Helicopters
Kamuela, HI

Lake Air Corp.
Michigan City, IN

Lake County Sheriff
Friffith, IN

Lake Wales Air Service Inc.
Lake Wales, FL

Lakehead Helicopter Service
Thunder Bay, ON, Canada

Lakeland Helicopters Ltd.
Temagami, ON, Canada

***Lakeland Helicopters Ltd.**
P.O. Box 370
Taupo, New Zealand
☎074-84532 ☐63279
Managing Director: Geoff Prince
Chief Pilot: Toby Clark
Operations: Agriculture, Air carrier (US part 127),
Air taxi/charter (US part 135), Construction,
EMS/air ambulance, Executive transport,
Government contracting, Herding (stock & wildlife),
Patrol (power, pipeline, buried cable), Photography,
Sightseeing, Skiing
Helicopters: **2**-369D,**1**-206B

Lakeline Helicopters, Inc.
Eden Prairie, MN

Lancaster County Sheriff
Lincoln, NB, Canada

Lance Aviation
Torcy, France

Landells Aviation
Desert Hot Springs, CA

Landry Aviation
North Hollywood, CA

Lanes Valley Forge
Collegeville, PA

Lange Helicopters Inc.
San Angelo, TX

Lapham Aviation, Inc.
Center Point, TX

Lapplandsflyg/Lapair AB
Umea Airport
Umea, 90254, Sweden
☎90-129050 ☐54029
President: Bertil Johansson
Operations Manager: Gunnar Forsberg
Maintenance Manager: Tage Stoltz
Operations: Air taxi/charter (US part 135),
EMS/air ambulance, Executive transport,
External cargo, Herding (stock & wildlife),
Mechanic training school,
Patrol (power, pipeline, buried cable),
Photography, Pilot training school,
Repair station (FAA certified),
Sightseeing, Skiing
Helicopters: **1**-47G2,**1**-206L,**2**-206B,
1-500D,**1**-300C

Laribee Helicopter Service
Camden, NY

Larimer County Sheriff
Fort Collins, CO

Laroy Flyg AB
Malmo-Sturup, Sweden

Larry's Flying Service Inc.
Denton, MT

Larsen Helicopters
Hayward, CA

Las Vegas Metro Police Department
Las Vegas, NV

Lassen Air
Chico, CA

Laverendrye Helicopters Inc.
Saint Clet, PQ, Canada

Lawn Hill Pty Ltd.
Mount Isa, Queensland, Australia

Leach Aero Services Pty. Ltd.
Alice Springs, NT, Australia

Lebanese Helicoper Co. S.A.L.
Beirut, Lebanon

Lee County Mosquito Control District
Fort Myers, FL

Lee County Sheriff
Fort Myers, FL

Lehigh Valley Helicopter, Inc.
P.O. Box 509
Allentown, PA 18105
☎215-398-2988
Operatons Manager: John R. Forsht
Operations: Executive transport, Photography
Helicopters: **1**-F28A

Lenhardt Airpark Inc.
Hubbard, OR

Lentini Aviation, Inc.
Pontiac, MI

Lentotoimi Oster & Heinonen
Pirkkala, Finland

Leon County Sheriff
Tallahassee, FL

Les Aire Inc.
Alva, OK

Les Helicopteres Trans-Quebec
Les Cedres, PQ, Canada

Lewis & Company Helicopters
Nacogdoches, TX

Liberty Helicopter
North Liberty, IN

Lider Taxi Aereo S.A.
Ave. Santa Rosa No. 123
Pampulha
Belo Horizonte MG 30, Brazil
☎031-441-9088 ☐031 1275
President: Jose A. Assumpcao
Director: Walter A. Barro
Operations Manager: Gilberto F. Miranda
Chief Pilot: Wanderley S. Gandra
Operations: Air taxi/charter (US part 135),
EMS/air ambulance, Construction,
Executive transport, Exploration,
External cargo, Government contracting,
Offshore, Patrol (power, pipeline, buried cable),
Photography, Sightseeing
Helicopters: **4**-205A,**12**-206B,**4**-S58T,
7-B212,**1**-214S

Liftair International Ltd.
Calgary, AB, Canada

Lincoln Aviation
Lincoln, NE

Litton Business Systems Inc.
Fitchburg, MA

Livingston Copters
Juneau, AK

Lloyd Helicopters Pty. Ltd.
Adelaide, SA, Australia

Lodi Vintage Air Inc.
Lodi, CA

London Home Improvement
Harvard, IL

Lone Star Aero
Houston, TX

Lone Star Helicopters, Inc.
Love Field
P.O. Box 25
Dallas, TX 75235
☎214-352-1033 ☐753768
President: Douglas Evans
Chief Pilot: Dee Neal
Director of Maintenance: Bill Koerner
Operations: Air taxi/charter (US part 135),
Commuter air carrier (scheduled),
Construction, Electronic news gathering,
EMS/air ambulance, Executive transport,
Exploration, External cargo,
Government contracting,
Patrol (power, pipeline, buried cable),
Photography, Repair station (FAA certified),
Sightseeing
Helicopters: **5**-206B,**3**-206L

Long Beach Helicopters Ltd.
Nanaimo, BC, Canada

Long Beach Police Department
Long Beach, CA

Louisiana Helicopters, Inc.
Metairie, LA

Louisiana State Police
Baton Rouge, LA

Louisiana-Pacific Corp.
1840 Airport Road
Red Bluff, CA 96080
☎916-527-1371
President: Harry A. Merlo
Operations Manager: Montel Work
Chief Pilot: Wayne N. Hughes
Chief Pilot/Fixed Wing: David Dix
Operations: Corporate (US part 91, not for hire),
Executive transport, Forestry, general
Helicopters: **4**-206B

Low Level Dusting Co. Inc.
LaSalle, CO

Lowndes Ginning Co. Inc.
Valdosta, GA

Luftspiegel, Ltd.
Scarsdale, NY

Lufttransport A/S
P.O. Box 2008
N-9014 Haapet
Tromsoe, Norway
☎083-70022 ☐75885
Managing Director: Aage Krog
Operations Manager: Tore Skaar
Technical Manager: Svein Bertheussen
Deputy General Manager: Lars Thorsrud
Operations: Air taxi/charter (US part 135),
EMS/air ambulance, Construction,
Executive transport, Exploration,
External cargo, Government contracting,
Offshore, Patrol (power, pipeline, buried cable),
Photography, Sightseeing
Helicopters: **5**-332L,**2**-B212,**1**-B214,
2-205A,**3**-206B,**3**-350B

Lufttransport A/S
Andselv, Norway

Lund Flying Service Inc.
Ritzville, WA

M & W Flying Service Inc.
Porterville, CA

M H Production Company
Sabine Pass, TX

M K Spray Copters
Hastings, FL

M.F. Air Services Ltd.
Langley, BC, Canada

MAS-Mondial Air System
Saint Gilles, France

MHS-Helicopter GmbH
Munich, West Germany

MacKinnon Helicopter, Inc.
Alexandria, ON, Canada

Thompson MacKinnon
Lafayette, CA

Mack Trucks, Inc.
c/o Bethlehem Steel Aviation
Rural Delivery 4
Allentown, PA 18103
☎215-439-2102 ☐847429
Chief Pilot: A. Decker Goetz
Operations: Corporate (US part 91, not for hire)
Helicopters: **1**-B212

Macmillan Bloedel Ltd.
Flight Operations
5220 Airport Road
Richmond, BC, V7B 1B4, Canada
☎604-278-4807
Chief Helicopter Pilot: Doug Hare
Operations: Corporate (US part 91, not for hire)
Helicopters: **1**-206L

Madison Aviation
Mesa, AZ

Madison Parrish Sheriff
Tallulah, LA

Mados
Johore Bahru, Malaysia

Maersk Air
Dragor, Denmark

Maier Aviation GmbH
Frankfurt, Germany

Maine Helicopters, Inc.
Augusta, ME

Malaysia Air Charter
Kuala Lumpur, Malaysia

Malaysian Helicopter Services Berhad
Syed Kecik Building, Banesar
Kuala Lumpur, Malaysia
☎03942044 ☐MHSKL 31809
President: Wan Malik Ibrahim
Flight Operations Manager: Peter Wong
Engineering Manager: Moghni Rahmat
Operations: Offshore
Helicopters: **5**-S61N,**3**-S76A,**4**-330J

Management Aviation Ltd.
Cambridge, England

Maneckji Aviation Private Ltd.
Bombay, India

Manila Electric Company
Pasig, Philippines

Alan Mann Helicopters Ltd.
Surrey, England

Manuiwa Airways, Inc.
Honolulu, Oahu, HI

Manville Corporation
Denver, C0

***Maple Leaf Helicopters (Canada)**
5455 Airport Road South
Richmond, BC, V7B 1B5, Canada
☎604-270-4143 ☐04-35791
President: Don Plaunt
Marketing & Operations: Joe Barr
Operations: Air carrier (US part 127),
Air taxi/charter (US part 135),
Construction, Corporate (US part 91, not for hire),
EMS/air construction, Exploration, External cargo,
Fire control/support, Forestry/general,
Government agency/not for hire, Logging,
Photography, Pilot training school,
Sightseeing, Skiing
Helicopters: **2**-206B,**1**-204B

Maple Leaf Helicopters Ltd.
Fort Saint John, BC, Canada

Mar Aviation Inc.
Brawley, CA

Marathon Flight School Inc.
Kissimmee, FL

March Helicopters Ltd.
Sywell, Northants, England

Maricopa County Sheriff
Phoenix, AZ

Marine Helicopters Ltd.
Auckland, New Zealand

Maritime Helicopters, Inc.
Homer, AK

Marlborough Helicopters, Ltd.
Blenheim, New Zealand

Marom Air Services Ltd.
Tel Aviv, Israel

Marshall County Police Department
Plymouth, IN

Marshall County Sheriffs Department
Holly Springs, MS

Martin Aviation, Inc.
Santa Ana, CA

Martin Enterprises Inc.
Phoenix, AZ

Martin Leasing Service
Riviera, TX

Marty Corp.
Coeburn, VA

Maryland State Police
Baltimore, MD

Massachusetts Mutual
Springfield, MA

Massachusetts State Police
Boston, MA

Maui Helicopters Inc.
P.O. Box 1002
Kihei, HI 96753
☎808-879-2622
President: Dale Vercelli
Operations: Air taxi/charter (US part 135),
External cargo, Government contracting,
Law enforcement (for hire), Photography, Sightseeing
Helicopters: **2**-500D

Maverick Helicopters Inc.
Seville, FL

Max Power, Inc.
Carlsbad, CA

Maxair
Appleton, WI

Mayne Bristow Helicopters Pty.
Jandakot, WA, Australia

Mayo Aviation
Denver, CO

McAlpine Helicopters Ltd.
Middlesex, England

McCollum Aviation Inc.
Danville, IL

McIver Aviation
Hoxton Park, NSW, Australia

McMahon Helicopter Services, Inc.
Executive Heliport Building
8351 Ronda Drive
Canton, MI 48167
☎313-459-5980
President: Brian McMahon
Operations: Air taxi/charter (US part 135),
Electronic news gathering, Executive transport,
Patrol (power, pipeline, buried cable),
Photography, Pollution detection/monitoring
Helicopters: **3**-206B,**1**-206L

McQuaid Helicopters
Mineral Wells, TX

Meadow Lark Aviation
Chino, CA

Meekins, Inc.
Hollywood, FL

Memphis Helicopters, Inc.
Bartlett, TN

Memphis Metro Police Department
Memphis, TN

Mendel Flying Service, Inc.
Malta, MT

Menehune Helicopters, Ltd.
Lihue, Kauai, HI

Menzi Agricultural Corporation
Makati, Philippines

Meravo Luftreederei
Oedheim, West Germany

Merifield Helicopters Pty. Ltd.
Perth, WA, Australia

Mesa County Sheriff
Grand Junction, CO

The Metamora Elevator Company
Lyons, OH

Metro Copters Incorporated
10740 Pine Bluff Road
Whitmore Lake, MI 48189
☎313-231-3861
President: Patrick J. Monks
Secretary: Dianne Monks
Operations: Corporate (US part 91, not for hire),
Photography, Private owners, Traffic surveillance,
Electronic news gathering
Helicopters: **1**-500D,**1**-280C

Metro Helicopters Inc.
Houston, TX

Metro Helicopters Ltd.
Burnaby, BC, Canada

Metro-Dade Fire Department
Miami, FL

Metro-Dade Police Department
Opa Locka, FL

Metro Helicopter Inc.
Wahoo, NE

Metropolitan Helicopter Corp.
New York, NY

Metropolitan Helicopter Service Inc.
952 Holmdel Road
Holmdel, NJ 07733
☎201-946-8134
President: Edward Cruz
Operations Manager: Nick Ferrante
Operations: Air taxi/charter (US part 135),
Corporate (US part 91, not for hire),
Executive transport, Photography
Helicopters: **1**-206L

Metropolitan Helicopter Corp.
Ridgefield Park, NJ

Metropolitan Helicopters
Glenco, MO

Miami Helicopter Service, Inc.
Opa Locka, FL

Miami Police Department
Miami, FL

Michaud Aviation
Willows, CA

Mid Atlantic Helicopters Inc.
Saint Charles, MO

Mid Continent of California
Oxnard, CA

Mid Ohio Chemical
Mount Sterling, OH

Mid Valley Helicopters, Inc.
397 Talbot Road, S.E.
Jefferson, OR 97352
☎503-327-1169
President: Frank Gilmour
Operations: Agriculture, Air taxi/charter (US part 135),
Bank paper transportation,
Executive transport, Exploration,
External cargo, Fire control/support,
Forestry, general, Government contracting,
Herding (stock & wildlife),
Patrol (power, pipeline, buried cable),
Pollution detection/monitoring, Sightseeing, Traffic surveillance, Electronic news gathering
Helicopters: **2**-206B

Mid-America Helicopters, Inc.
Chesterfield, MO

Mid-State/Executive Helicopters
2001 Flightway Drive
Dekalb-Peachtree Intl Airport
Atlanta, GA 30341
☎404-458-6082
Owner/President: Jack Hereth
Director of Operations: Richard L. Santmyer
Chief Pilot: Mike Ward
Chief Mechanic: Kent Hurd
Operations: Air taxi/charter (US part 135),
Construction, Executive transport, External cargo,
Patrol (power, pipeline, buried cable),
Photography, Pilot training school,
Repair station (FAA certified), Traffic surveillance
Helicopters: **2**-206B,**3**-300C,**1**-500D,**1**-350B,
1-206L,**1**-B105

Mid-West Rotors
Kahoka, MO

Midland County Sheriff
Midland, TX

Midland Helicopters Inc.
104 S. Pecos
Midland, TX 79701
☎915/682-3753
Owner & Pilot: Carty Beal
Operations: Corporate (US part 91, not for hire),
Private owners
Helicopters: **1**-206L

Midway Aircraft Company
Wood Ridge, NJ

Midwest Air Service, Inc.
Rochester, IN

Midwest Aviation Inc.
Fargo, ND

Midwest Helicopter Airways, Inc.
Midwest Heliport
Hinsdale, IL 60521
☎312-325-7860 ☐°
President: Richard J. Smith
Vice President: Jack Hansen, Jr.
Secretary/Treasurer: S.L. Smith
Operations: Air taxi/charter (US part 135),
Bank paper transportation, Construction,
EMS/air ambulance, Executive transport,
Exploration, External cargo,
Forestry, general, Government contracting, Logging
Helicopters: **1**-S58T,**2**-S58J,**1**-206L,
1-12E4

Midwest Helicopter Co. Inc.
Cecil, OH

Midwest Helicopters Ltd.
Fort McMurray, AB, Canada

Midwest Helicopters Ltd.
Winnipeg, MB, Canada

Mikko Hanninen Kommandittiyhto
Saarijarvi, Finland

Milliken & Company
P.O. Box 567
Greer, SC 29652
☎803-877-8338 ☐570357
Chief Pilot: David V. Howell
Pilot: William D. Robinson
Pilot: Louis L. Sexauer
Operations: Corporate (US part 91, not for hire)
Helicopters: **1**-S76A

* Indicates that complete membership application has been received and is now being processed in accordance with official HAI Bylaws.

Mincorp, Inc.
P.O. Box 260
Friedens, PA 15541
☎814-443-4668
Chief Pilot: William J. Tritt, Jr.
Chairman of The Board: Fred S. Shaulis
Operations: Executive transport,
Air taxi/charter (US part 135),
Corporate (US part 91, not for hire)
Helicopters: **1**-350D,**1**-355E

Minnesota State Police
Saint Paul, MN

Minnkota Power Co-op, Inc.
P.O. Box 1318
Grand Forks, ND 58206-1318
☎701-795-4430
President: Lyle Lund
Operations Manager: Ray Schafer
Pilot: Tom Cochran Operations:
Corporate (US part 91, not for hire)
Helicopters: **1**-206B

Minuteman Aviation Inc.
Missoula, MT

Missouri State Highway Patrol
Jefferson City, MO

Mitchell Helicopter Service
Paragould, AR

Miyauchi Trading K.K.
Tokyo, Japan

Mobil Oil Canada, Ltd.
P.O. Box 800
Calgary, AB, T2P 2J7, Canada
☎403-268-7687 ☐6108210561
Aviation Manager: R.M. McNichol
Operations: Corporate (US part 91, not for hire),
Exploration, Offshore

Mobil Oil Corporation
100 First Stamford Place
P.O. Box 10160
Stamford, CT 06904-2160
☎203-328-7116 ☐516906
Chief Aviation Advisor/Helicopters: Joseph C. Gross
Aviation Advisor/Helicopters: Carey Howard
Chief Aviation Advisor/Maintenance: James C. Bennet
General Manager, Aircraft Services: D.E. Coffman
Operations: Corporate (US part 91, not for hire),
Offshore
Helicopters: **8**-206L,**1**-S76A,**2**-355F

Mobil Oil Exploration &
Producing Southeast, Inc.
Aircraft Operations Department
1200 Youngs Road
Morgan City, LA 70380
☎504-384-9550 ☐8109505716
Aviation Manager: T.D. Rhodes
Chief Pilot: W.G. Odom
Chief of Maintenance: B.R. Timberlake
Operations: Corporate (US part 91, not for hire),
Executive transport, Offshore
Helicopters: **1**-S76A,**2**-355F,**8**-206L

Mobil Producing Services E A Inc.
Hangar 505, West Camp Seletar Airport
Singapore, 2879, Singapore
☎481-3015 ☐RS34677
Chief Pilot: Captain Larry B. Edeal
Operations: Exploration, Offshore
Helicopters: **1**-330J,**3**-B105,**2**-B412

Modern Aero of Texas Inc.
Dallas, TX

Modern Constructors, Inc.
Duluth, MN

Mohawk Helicopter Service Inc.
Schenectady, NY

R.J. Monahan Helicopter
Bulverde, TX

Mont-Blanc Helicopteres
Annemasse, France

Monterey Peninsula Helicopters Inc.
312 W. Carmel Valley Road
Carmel Valley, CA 93924
☎408-659-3898
President: Michael P. Marquard
Vice President: Robert E. McDonald III
Secretary-Treasurer: Diane R. Marquard
Chief Pilot: Robert L. Eversmann
Operations: Air taxi/charter (US part 135),
Construction, Executive transport,
External cargo, Fire control/support,
Forestry/general, Government contracting,
Herding (stock & wildlife), Law enforcement (for hire),
Patrol (power, pipeline, buried cable),
Photography, Sightseeing
Helicopters: **1**-300C,**1**-206B

The Moody Group Inc.
Worcester, MA

Moore Aviation Inc.
Tulare, CA

Moore's Hawaiian Helicopters
Mililane Town, HI

Morefly A/S
Vigra, Norway

Morse Aero Inc.
Utica, NY

Motorflug GmbH
Airport Baden-Baden
P.O. Box 2080
Baden-Baden, 7570, West Germany
☎7221-61003-5 ☐781129
President: Christoph von Barner
Purchasing Manager: Georg Krome
Public Relations: Gerhard Herrmann
Operations: Air taxi/charter (US part 135),
Executive transport, Government contracting,
Mechanic training school, Photography,
Pilot training school,
Repair station (FAA certified), Sightseeing
Helicopters: **1**-206B

Mount Cook Group Ltd.
Christchurch, New Zealand

Mountain Air Helicopters Inc.
Albany, OR

***Mountain Bell Flight Operations**
8845 Montview Boulevard
Denver, CO 80220
☎303-398-5353
Director, Corporate Aviation: Richard Bucknell
District Manager, Network Switch Services:
Robert L. Henderson
Chief Pilot: Mike Fergione
Manager, Aircraft Maintenance: Terry E. Edwards
Operations: Construction,
Corporate (US part 91, not for hire),
Executive transport, External cargo,
Patrol (power, pipeline, buried cable)
Helicopters: **1**-206L

Mountain Helicopters Ltd.
Greymouth, New Zealand

Mountain Jet Aviation, Inc.
P.O. Box 669
Elkins, WV 26241
☎304-636-6803
President: Dennis G. Peterson
Operations: Agriculture, Air taxi/charter (US part 135),
EMS/air ambulance, Executive transport,
Forestry, general, Government contracting,
Law enforcement/for hire,
Patrol (power, pipeline, buried cable),
Photography, Skiing
Helicopters: **1**-206B

Mountain States
Rigby, ID

Mountain West Helicopters
P.O. Box 228
Kalispell, MT 59901
☎406-755-3333
President: Ted W. Parod
Vice President/Treasurer: Henry M. Galpin
Operations: Air taxi/charter (US part 135),
EMS/air ambulance, Exploration,
External cargo, Fire control/support,
Forestry, general, Government contracting,
Photography, Repair station (FAA certified), Sightseeing
Helicopters: **3**-206B,**1**-206L

Mountain West Helicopters
La Grange, WY

Municipal Spraying & Contracting Limited
Bedford, NS, Canada

Murrayair Ltd.
Honolulu, HI

Musashi Koku Company, Ltd.
Kazo, Saitama, Japan

Myong Am Tourist Co.
Seoul, Korea

N.C. Hutton Ltd.
Saint Johns, NF, Canada

NASA
Ames Research Center
Mail Stop 200-3
Moffett Field, CA 94035
☎415-965-5066
Director/Aeronautics & Flight: Leonard Roberts
Helicopers: **3**-B205,**1**-206B,**1**-500A,**1**-S61N

NEP Communications, Inc.
Wilkes-Barre/Scranton International Airport
Avoca, PA 18641
☎717-826-1616
President: Thomas Shelburne
Vice President/General Manager: Elden Hale
Vice President/Treasurer: Peter Kozloski
Aviation Dept. Manager: Jack Ruland
Operations: Electronic news gathering
Helicopters: **1**-206B

Naka-Nihon Air Services Co., Ltd.
Aichi, Japan

Naples Helicopters Inc.
Naples, FL

Narrows Helicopter Inc.
Narrows, VA

Nashville Metro Police Department
Nashville, TN

Nassau County Police Air Bureau
Bethpage, NY

National Air College
San Diego, CA

National Crime Prevention Institute
Louisville, KY

National Helicopter Service & Engineering Co.
Van Nuys, CA

National Power Corporation
Pasay, Philippines

National Utilities & Industries
Elizabeth, NJ

National Utility Helicopters Ltd. P.T.
Jalan Suryopranoto No. 11-G
Jakarta, Pusat, Indonesia
☎4815188 ☐RS36996
President: Rusmiputro Wibisono
Operations Manager: Richard Alzetta
Maintenance Manager: Barry McCutcheon
Maintenance Manager: James Faulks
Branch Manager: Vince Ko
Operations: Air taxi/charter (US part 135),
Construction, Executive transport,
Exploration, External cargo,
Forestry, general, Government contracting,
Logging, Offshore,
Patrol (power, pipeline, buried cable),
Photography, Sightseeing, EMS/air ambulance
Helicopters: **7**-205A,**1**-206B

Natrona County Sheriff
Casper, WY

Navajo Aviation
Concord, CA

Navar Aeromarine Inc.
El Paso, TX

Nealco Air Services Ltd.
Port of Spain, Trinidad

Nevada Highway Patrol
Carson City, NV

New England Helicopter Airlines Inc.
Bloomfield, CT

---

* Indicates that complete membership application has been received and is now being processed in accordance with official HAI Bylaws.

New Hampshire Helicopters, Inc.
Foss Lane
P.O. Box 1030
Hampton, NH 03842
☎603/926-4949
General Manager: George F. Vincent
President: Stephen W. Foss
Operations: Air taxi/charter (US part 135),
CR, Executive transport, Photography,
Repair station (FAA certified), Sightseeing
Helicopters: **1**-206B

New Hampshire State Police
Concord, NH

New Horizon Helicopter Corp.
Cutchogue, NY

New Horizons Aviation Inc.
P.O. Box 30353
Cincinnati, OH 45230
☎513-232-1835
President: William L. Bowman
Operations: Air taxi/charter (US part 135),
Executive transport, Electronic news gathering,
Patrol (power, pipeline, buried cable),
Photography, Repair station (FAA certified),
Traffic surveillance
Helicopters: **1**-F28

New Jersey Bell Telephone Co.
540 Broad Street
Room 1400
Newark, NJ 07101
☎201-649-2813
Manager, Service Bureau: John J. White
Operations: Corporate (US part 91, not for hire)
Helicopters: **1**-S76A

New Mexico State Police
Santa Fe, NM

New World Aviation Pty. Ltd.
Sydney, NSW, Australia

New York City Police Department
Brooklyn, NY

New York State Aviation
Albany, NY

New York State Police
State Campus
Building 22
Albany, NY 12226
☎518-457-5929
Assistant to Superintendent: Gary E. Preston
Chief Pilot: S.R. Thomas
Operations: EMS/air ambulance,
Government agency (not for hire),
Law enforcement (for hire)
Helicopters: **1**-222/,**3**-206L

Newhouse Broadcasting Corp.
Syracuse, NY

Newport Beach Police Department
Newport Beach, CA

Newton Township Police Department
Newton Square, PA

Norin Helicopter Co. Ltd.
Tokyo, Japan

Nihon Sangko Koku Co. Ltd.
Osaka, Japan

Nile Delta Air Service
Cairo, Egypt

Nipissing Helicopter Inc.
Sturgeon Falls, ON, Canada

Nishi Nippon Airlines Co. Ltd.
Fukuoka, Japan

Nor Air, Inc.
Benton Hill Road
Sharon, CT 06069
☎203-364-0450
President/Owner: James E. Sinclair
Public Relations: Sharon L. Jones
Chief Pilot: Owen R. Jones
Operations: Agriculture,
Corporate (US part 91, not for hire)
Exploration, External cargo
Helicopters: **1**-341G,**1**-47G2

Norcross Helicopters, Inc.
Rochester, NY

Nord Aviation Inc.
Pembina, ND

Nord-Flyg AB
Eskilstuna, Sweden

Nordlandsflyg AB
Gallivare, Sweden

North American Helicopter Service
Redmond, WA

North Carolina Helicopters Inc.
Gastonia, NC

North Coast Helicopter Service Inc.
Stockton, CA

North Miami Beach Police Department
North Miami Beach, FL

North Scottish Helicopters
Dyce, Aberdeen, England

North Shore Helicopters Ltd.
North Vancouver, BC, Canada

North Star Helicopter Inc.
Hearst, ON, Canada

North-Air Helicopters Inc.
Frackfort, NY

Northeast Helicopter Service
RFD 1, Box 542
Bucksport, ME 04416
☎207-827-2212
President: Albert P. Averill
Operations Manager: Mark Averill
Operations: Agriculture, Air taxi/charter (US part 135),
External cargo, Forestry, general,
Patrol (power, pipeline, buried cable)
Helicopters: **3**-47G5

Northeast Helicopters, Inc.
Ellington, CT

Northern Aviation Inc.
Nome, AK

Northern Mountain Helicopters
Prince George, BC, Canada

Northlands Helicopters Alta
Winterburn, AB, Canada

Northrop Corporation
Electro-Mechanical Division
500 E. Orangethorpe Avenue
Anaheim, CA 92801
☎714-441-4027 ☐655417
Administrator/Helicopter Operations: Todd A. Miller
Operations: Government contracting,
Government agency (not for hire)
Helicopters: **1**-B212

Northslope Burough Search
Barrow, AK

Northstar Helicopters
Hearst, ON, Canada

Northwest Aviation Spray Co.
Independence, OR

Northwestern Enterprises
Heyburn, ID

Norwegian Air Ambulance
P.O. Box 94
1441 Drobak, Norway
☎02932160 ☐72458
President: Tor Eggesvik
General Manager: Jens Moe
Operations Manager: Roy Estensen
Operations: Air taxi/charter (US part 135),
EMS/air ambulance, Executive transport,
External cargo, Law enforcement (for hire),
Sightseeing, Photography,
Traffic surveillance
Helicopters: **3**-B105,**1**-206B

Nova, an Alberta Corporation
Aviation Department
P.O. Box 2330
9888 Jasper Avenue
Edmonton, AB, T5J 2R1, Canada
☎403-423-8266
Operations Manager: Wayne Martyn
Chief Pilot: Ian McLeod
Operations: Corporate (US part 91, not for hire)
Helicopters: **2**-206B,**1**-AS355

Nova Helicopters Ltd.
Richmond, BC, Canada

Nova Lumber Company Limited
200 Bridge Street
North Vancouver, BC V7H 1W7, Canada
☎604-929-3471 ☐04352604
President: N. Earl Noble
Vice President: Vic Noble
Operations: Corporate (US part 91, not for hire),
Forestry, general, Private owners
Helicopters: **1**-206L

Nova Scotia Department of
Lands & Forests Air Service
Shubenacadie, NS, Canada

Nova Scotia Power Corporation
Halifax, NS, Canada

O'Brien International Ltd.
6623 N.E. 82nd Avenue
Suite 102
Portland, OR 97220
☎503-254-6516
President: Michael L. O'Brien
Operations: Air taxi/charter (US part 135),
Construction,
Corporate (US part 91, not for hire),
EMS/air ambulance, Executive transport,
Exploration, External cargo,
Fire control/support, CO,
Government contracting,
Herding (stock & wildlife),
Law enforcement (for hire), Logging,
Mechanic training school, Offshore,
Patrol (power, pipeline, buried cable),
Photography, Pollution detection/monitoring,
Private owners, Sightseeing
Helicopters: **1**-206B,**1**-500D,**2**-500C

O'Reilly's Econo Leasing
Tucson, AZ

Oak Mountain Helicopter Inc.
Birmingham, AL

Oakland Police Department
Oakland, CA

Oasis Petroleum Corporation
Culver City, CA

Tom O'Connor, Jr.
1 O'Connor Plaza
Suite 1100
Victoria, TX 77901
☎512-578-6271
Chief Pilot: Rufus Rogers
Pilot: Dennis O'Connor, III
Operations: External cargo,
Herding (stock & wildlife),
Patrol (power, pipeline, buried cable),
Photography, Private owners
Helicopters: **1**-500D,**1**-206L

Occidental Petroleum Corp.
Bakersfield, CA

Ocean Air Services Ltd.
Saint Johns, NF, Canada

Ochoa Helicopter Service
Woodland, CA

Office of State Attorney
Live Oak, FL

Office of the Sheriff
Jacksonville, FL

Ohio Agrotors Inc.
Mineral Ridge, OH

Ohio Helicopter Inc.
Wilmington, OH

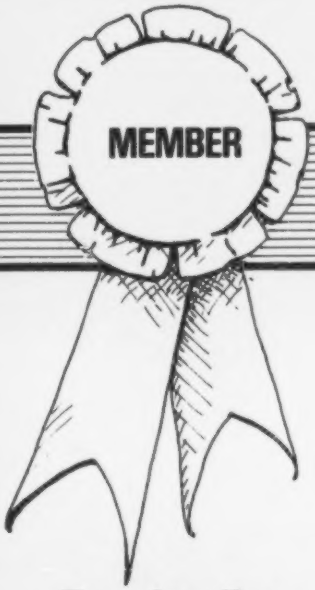
Ohio State Highway Patrol
Worthington, OH

Okanagan Helicopters Australia
Applecross, WA, Australia

Okanagan Helicopters Ltd.
Seletar Airbase, Singapore

Okanagan Helicopters Ltd.
Bombay, India

Okanagan Helicopters Ltd.
Cebu City, Philippines



Be a leading exponent of the helicopter industry

...by becoming a member of HAI.

Even a modest increase in membership means an exponential increase in our ground effect.

The HAI enjoys a worldwide reputation as the focal point and principal forum of the civil helicopter industry.

And the direct benefits HAI offers its members provide an immediate return on the investment. Services and benefits run the gamut—from The Helicopter Annual to management and safety seminars designed specially for helicopter operators.

There are three membership categories: helicopter operators, associate members (suppliers to the industry) and sustaining members (individuals who wish to support the growth of the helicopter industry).

Joining will give you an excellent benefit package now, and will increase the magnitude of HAI's efforts on behalf of the entire industry.

For a free information package on HAI membership, return the postpaid card on page 80, or call the
Helicopter Association International,
1619 Duke Street
Alexandria, VA 22314-3406
Telephone: 703-683-4646
Telex: 89-615

Helicopter
Association
International

Okanagan Helicopters, Ltd.
4391 Agar Drive
Richmond, BC, V7B 1A5, Canada
☎604-278-5502 □04355594
President & General Manager: Pat A. Aldous
Senior Vice President, Mkting: Fred A. Moore
General Manager, Operating Div: Dick Everson
Operations: Air taxi/charter (US part 135),
Construction, EMS/air ambulance, Exploration,
External cargo, Fire control/support,
Forestry, general,
Government agency (not for hire), Logging,
Mechanic training school, Offshore,
Patrol (power, pipeline, buried cable),
Photography, Pilot training school,
Repair station (FAA certified), Sightseeing, Skiing
Helicopters: **71**-206B,**7**-206L,**3**-205A,
11-B212,**2**-214S,**12**-S76A,**10**-S61N,**2**-332C

Okanagan Helicopters, Ltd.
Bangkok, Thailand

Okanagen Helicopters Ltd.
Estado Monagas, Venezuela

Oklahoma Aircraft Corp.
Yukon, OK

Oklahoma Aviation Co.
Oklahoma City, OK

Oklahoma City Police Department
Oklahoma City, OK

Oklahoma Helicopters, Inc.
Norman, OK

Oklahoma Highway Patrol
Bethany, OK

Olink Enterprises, Inc.
Princeton, NJ

Oliver Helicopter & Engineering Corp.
Apple Valley, CA

Olivers Helicopters Inc.
Bloomingdale, IL

Olympic Aviation SA
Athens, Greece

Olympic Helicopter in Ohio Inc.
Bowling Green, OH

Omni Helicopters Inc.
Cleveland, OH

Omniflight, Inc.
105A Wappoo Creek Drive
Suite 1
Charleston, SC 29412
☎803-762-1620
Chief Executive Officer: Daniel Parker
Executive Vice President: Roland F. Wisner
Director, Maintenance Services: Hans Hilkhoysen
Operations: Agriculture, Air taxi/charter (US part 135),
Commuter scheduled, Electronic news gathering,
EMS/air ambulance, Executive transport,
Forestry, general, Offshore,
Patrol (power, pipeline, buried cable),
Pilot training school
Helicopters: **2**-WG30,**25**-206B,**15**-206L,**5**-B222,**2**-B212,
7-B105,**3**-BK117,**1**-500E,**9**-300C

Omniflight Aircraft Corporation
Route 7, Highway 51 South
Janesville, WI 53545
☎608-756-3631
President: Donald R. Bradburn
Operations: Aircraft sales

Omniflight Airways, Inc.
P.O. Box 15440
Glen L. Martin State Airport
Hangar 6
Baltimore, MD 21220
☎301-391-7722
President: Paul Tomlinson
Operations: Air taxi/charter (US part 135),
Electronic news gathering, EMS/air amublance,
Forestry, general, Pilot training school

Omniflight Helicopters, Inc.
Route 7, Highway South
Janesville WI 53545
☎608-756-3631
President: Barry von Falkenstein
Operations: Electronic news gathering,
EMS/air ambulance, Forestry, general,
Patrol (power, pipeline, buried cable)

Omniflight Helicopter Services, Inc.
P.O. Box 406
Linden Airport
Hangar 3
Linden, NJ 07608
☎201-862-5300
President: Peter Q. Bales
Operations: Commuter scheduled, Executive transport

Omniflight Offshore, Inc.
International Airport
Route 2, Box 905
Corpus Christi, TX 78410
☎512-289-1181
President: John R. Davis, Jr.
Operations: Offshore

Onandaga County Sheriff's Department
Cessna Drive, Hangar 1
Warners, NY 13164
☎315-425-3095
Major: J.A. Mehlek
Operations Manager: Lt. P.C. Zemenz
Chief Pilot: Carl L. Mosegard
Chief Mechanic: Henry Newman
Operations: EMS/air ambulance,
Law enforcement (not for hire),
Photography, Traffic surveillance
Helicopters: **1**-206B

Ontario Hydro
Hangar 10
2450 Derry Road East
Mississauga, ON, L0G 1K0, Canada
☎416-677-1330 □06-217662
Superintendent Helicopter Services: Robert F. Seymour
Manager/Central Maintenance: W. Andrew Humphries
Pilot Supervisor: John M. Carnie
Maintenance Supervisor: John R. Benben
Operations: Construction,
Corporate (US part 91, not for hire),
EMS/air ambulance, Executive transport, Exploration,
External cargo, Forestry, general, Photography,
Patrol (power, pipeline, buried cable)
Helicopters: **2**-S58T,**5**-206B,**1**-47G4

Ontario Provincial Police
Toronto, ON, Canada

Ontrac Air Service
Marysville, WA

Oregon Helicopters Inc.
Culver City, CA

Oregon State Police
Portland, OR

Orlando Helicopter Airways Inc.
P.O. Box 2802
Orlando, FL 32802
☎305-841-3480 □564400
Chairman of the Board: Fred P. Clark
Operations: Agriculture, Construction,
External cargo, Repair station (FAA certified)
Helicopters: **3**-S58T,**4**-S55T,**3**-S52A

Osaka Airways Co., Ltd
Oaska, Japan

Osterman Helicopter
Malmo, Sweden

Osterman Helicopter
Save, Sweden

Ostermans Aero AB
Box 422
Jarfalla, S-175 25, Sweden
☎08-7602720 □17294
President: Ragnar Frimodig
Chief Pilot: Bo Isaksson
Director/Technical P.R.: Henrih Elinder
Director of Operations: Bengt Billing
Operations: Air taxi/charter (US part 135),
Commuter air carrier (scheduled),
Construction, External cargo,
Government contracting, Offshore, Photography,
Pilot training school,
Repair station (FAA certified), Sightseeing
Helicopters: **3**-206L,**1**-206B,**1**-280C

Ostersunds Helikopter AB
Ostersund, Sweden

Owyhee Air Inc.
Grandview, ID

Oxnard Police Department
Oxnard, CA

Ozark Mountain Helicopters Inc.
Branson, MO

***P.J. Hydraulics, Inc.**
Box 187—341 King Street
Myerstown, PA 17067
☎717-866-5795 ☐842545
Chairman of the Board: Leroy G. Miller
President: Richard L. Miller
Executive Vice President: James Shirato
Operations: Corporate (US part 91, not for hire)
Helicopters: **1**-F28C

P.M. Dusters Inc.
Chico, CA

P.M.C.A. Associated Company, Ltd.
Bangkok, Thailand

PAS-Professional Air System
Trappes, France

PDQ Air Service Inc.
Pontiac, MI

PLM Helicopters Ltd.
Inverness, Scotland

PacifiCorp Trans, Inc.
851 S.W. 6th Avenue
260 PFFC Building
Portland, OR 97224
☎503-243-7075 ☐9104641594
President: Karl Hoffman
Vice President/Operations: James E. Sites
Senior Captain/Helicopters: John L. Judge
Chief Pilot: Allen R. Duckett
Operations: Corporate (US part 91, not for hire),
Executive transport,
Patrol (power, pipeline, buried cable)
Helicopters: **1**-109A,**1**-500D

Pacific Air Logistics, Inc.
Burbank, CA

Pacific Flights Inc.
Medford, OR

Pacific Helicopters Ltd.
Delta, BC, Canada

Pacific Helicopters Pty. Ltd.
Goroka, Papua, New Guinea

Pacific Helicopters, Inc.
Startup, WA

Pacific Lumber & Shipping Co.
P.O. Box 21785
Seattle, WA 98111
☎206-682-7262
President: Charles L. Spence
Operations Manager: Michael S. Davenport
Operations: Air taxi/charter (US part 135),
Construction, Electronic news gathering,
Executive transport, Exploration,
External cargo, Forestry, general,
Patrol (power, pipeline, buried cable),
Photography, Sightseeing
Helicopters: **1**-206B

Pacific Rotors Inc.
Oceanside, CA

Pacific Wing & Rotor Inc.
Long Beach, CA

Palm Beach County Sheriff
West Palm Beach, FL

Palm Springs Aviation Inc.
Desert Hot Springs, CA

Palmetto Helicopters, Inc.
Greenville, SC

Pan Air Helicopters, Ltd.
Metcalf, ON, Canada

Pan American World Airways
200 Park Avenue
Pan Am Building
New York, NY 10166
☎212-880-6464
V.P. Helicopter/Commutors: Harry E. McKillop
Operations: Air Carrier (US part 127),
Air taxi/charter (US part 135)
Helicopters: **2**-WG30,**4**-B222

Pan Europeane Air Service
Viviers du Lac, France

Panda Aviation
Atas Cadera, CA

Panhandle Aviation, Inc.
Lincoln, NE

Papillon Helicopters Ltd.
Hanalei, HI

Paramount Aviation Corp.
Lincoln Park, NJ

Park City Helicopter Service
Park City, UT

ParkCentre Properties
485 Carnegie Drive
San Bernadino, CA 92408
☎714-381-5301
Director Helicopter Operations: Jim Lloyd
Operations: Corporate (US part 91, not for hire)
Helicopters: **1**-500D

Parker Aviation Corp.
Worcester, MA

Parrish Flying Service, Inc.
Mount Vernon, IN

Partners In Life Flight
Long Beach, CA

Pasadena Police Department
Helicopter Section
142 N. Arroyo Parkway
Pasadena, CA 91103
☎818-405-4625
Officer in Charge: Lt. Nick J. Agosta
Second in Charge: Sgt. T.M. Blumenthal
Accounting: Officer Dennis M. Henslee
Operations: Government agency (not for hire),
Law enforcement (not for hire), Photography
Helicopters: **3**-F28C,**1**-F28A

Pasco County Sheriff Department
Newport Richey, FL

Pascual Hermanos S.A.
Valencia, Spain

Patterson Flying Service
Patterson, CA

Pay-Jay Air, Inc.
207 S. Fourth Street
Artesia, NM 88210
☎505-748-1331
President: Peggy A. Yates
Vice President: John A. Yates
Chief Pilot: Charles A. Throckmorton
Operations: Air taxi/charter (US part 135),
Corporate (US part 91, not for hire),
Executive transport, Herding (stock & wildlife),
Patrol (power, pipeline, buried cable),
Photography, Private owners, Sightseeing
Helicopters: **1**-350B

Pegasus Helicopters
Boulder, CO

Pegasus Helicopters Inc.
Yuba City, CA

Pelita Air Service, P.T.
JLN Abdul Muis 52-54
Jakarta, Indonesia
☎375908 ☐46462
President/Director: Mulyono
Operations: Air taxi/charter (US part 135),
EMS/air ambulance, Executive transport,
Exploration, External cargo,
Forestry, general, Government contracting,
Government agency (not for hire), Offshore,
Patrol (power, pipeline, buried cable)
Helicopters: **16**-330J,**3**-206B,**3**-B212,
29-500C,**5**-B105,**3**-319B

Pemberton Helicopter Services Ltd.
Pemberton, BC, Canada

Penerbangan Sabah SDN.BHD/
Sabah Air Pte Ltd.
Kota Kinabalu Int'l Airport
Lked Building 113
Kota Kinabalu, Sabah, Malaysia
☎56733 ☐80073
Managing Director: A.M. Bin Mohamed Noor
Operations: Air taxi/charter (US part 135),
Offshore, Agriculture, Photography,
EMS/air ambulance, Forestry, general
Helicopters: **8**-206B,**3**-B212,**1**-315B

Peninsula Aviation Company
Torrance, CA

Penn Lewis Helicopter Service Inc.
Lewistown, PA

Perforadora de Mexico, S.A.
Nacozari, Sonora, Mexico

Perkinson Copters, Inc.
P.O. Box 338
PCI Heliport
Warrensburg, IL 62573
☎800-637-4323
President: Roy S. Phillips
Director of Maintenance: Daniel Feeney
Operations: Agriculture, Air taxi/charter (US part 135),
Electronic news gathering,
Fire control/support, Government contracting,
Herding (stock & wildlife),
Law enforcement (for hire),
Patrol (power, pipeline, buried cable),
Pilot training school, Repair station (FAA certified)
Helicopters: **1**-500C,**3**-300C

Permian Aviation, Inc.
Santa Maria, CA

Peterson & Johnson
Argyle, MN

Peterson Maritime Services
New Orleans, LA

Petro Canada Aviation
Calgary, AB, Canada

Petro Helicopters Inc.
Zanesville, OH

Petroleos Mexicanos
Mexico City, D.F., Mexico

Petroleum Air Services (PAS)
P.O. Box 2711
Cairo, Egypt
☎609058 ☐21404
Chairman & Managing Director: Capt. Amir Riad
Deputy Managing Director: Eng. Mohsen Hassan
Assistant Managing Director: Capt. Tameem Fahmy
Technical Support Manager: Robert Ingle
Operations: Commuter air carrier (scheduled)
Helicopters: **14**-B212,**6**-206L,**2**-206B,
1-B222

Petroleum Helicopters, Inc.
P.O. Box 90808
Lafayette, LA 70509
☎318-235-2452 ☐586670
Chairman of the Board: Robert L. Suggs
President: Frank W. Lee
Vice Chairman of the Board: M.M. Bayon
Vice President/General Manager: Carl Dougherty
Operations: Air taxi/charter (US part 135),
Construction, EMS/air ambulance,
Executive transport, Exploration,
External cargo, Government contracting, Offshore,
Patrol (power, pipeline, buried cable),
Photography, Repair station (FAA certified)
Helicopters: **117**-206B,**120**-206L,
35-355F,**39**-B212,**14**-B412,**35**-350D,
8-B222,**4**-214ST,**14**-B105,**9**-330J,**19**-S76A

Petroleum Well Logging Inc.
Oklahoma City, OK

Petusa
Canary Islands

Pfeffer Custom Service
Mapleton, MN

Pfizer, Inc.
P.O. Box 7350
West Trenton, NJ 08628
☎609-771-0550
President: E.T. Pratt
Operations Manager: Gene A. DeCarlo
Operations: Corporate (US part 91, not for hire)
Helicopters: **1**-360C,**1**-365N

Phaeton S.A.
Athens, Greece

Philadelphia Police Department
Philadelphia, PA

Philippine National Oil Co.
Manila, Philippines

Philippine Resource Helicopter
Manila, Philippines

Phillips & Jordon Inc.
Beland, FL

Phil's Ag Air
Red Bluff, CA

* Indicates that complete membership application has been received and is now being processed in accordance with official HAI Bylaws.

Phoenix Air Corporation
2925 Briarpark, Suite 500
Houston, TX 77042
☎713-784-2420 ☐791449
Manager of Flight Services: Michael S. Baskin
Operations: Air taxi/charter (US part 135),
Executive transport, Offshore,
Patrol (power, pipeline, buried cable),
Photography, Sightseeing, Traffic surveillance,
Electronic news gathering
Helicopters: **1**-350D

Phoenix Police Department
Phoenix, AZ

Pine Belt Helicopters of Nevada, Inc.
Minden, NV

Pioneer Valley Aircraft Inc.
Jefferson, MA

Pirelli S/A
Alameda Barao de Piracicaba, 740
Sao Paulo, 01216, Brazil
☎220-8011 ☐011-21722
Operations Manager: Carlo de Bellgarde
Operations: Corporate (US part 91, not for hire),
Executive transport, Repair station (FAA certified)
Helicopters: **2**-206B

Pittson Coal Company
Lebanon, VA

Plains Helicopter Inc.
Slaton, TX

Pleasant Valley Helicopters
Camarillo, CA

Plymouth Copters Corporation
Plymouth, MA

Point de Jour Aviation Ltee
Mascouche, PQ, Canada

Port Authority of New York & New Jersey
121B Billy Diehl Road
Teterboro Airport
Teterboro, NJ 07608
☎201-288-2761
Manager of Heliports: Philip J. Landi
Operations: Government agency (not for hire)
Helicopters: **1**-B105,**1**-B222,**1**-222U

Portland General Electric Company
121 S.W. Salmon Street
Portland, OR 97204
☎503-226-8820
President: William Lindblad
Vice President: H. Lueddeman
Facilities Manager: Lee Hodges
Corporate Pilot: Bill Griffiths
Operations: Corporate (US part 91, not for hire),
Patrol (power, pipeline, buried cable)
Helicopters: **1**-B105

Portland Police Bureau
Portland, OR

Portsmouth Police Department
Chesapeake, VA

Powder Rivers Helicopters Inc.
Baker, OR

Powell Construction Company
Johnson City, TN

Powers Crop Dusters Inc.
Ochlocknee, GA

Powersair Helicopters, Inc.
Houston, TX

Precision Helicopter Services
Des Moines, IA

Presidency of Mexico
Mexico, D.F., Mexico

Preston Air Service
Morgantown, WV

Pro Charter Aviation Inc.
Buffalo, WY

Pro Flight of Vero Inc.
Vero Beach, FL

Procuraduria General de la Republica
Unida de Servicios Aereos
Mexico, D.F., Mexico

Professional Aviation, Inc.
Peoria, AZ

Professional Helicopter
San Luis Rey, CA

Professional Helicopter Services
Victoria, Australia

Propst Helicopters
Black Rock, AR

Provincial Government Services
Edmonton, AB, Canada

Ptarmigan Helicopters, Inc.
1553 Snyder Gulch Road
Evergreen, CO 80439
☎303-674-2487
President: David F. Youngblood
Vice President: David L. Cann
Operations: Air taxi/charter (US part 135),
Construction, Exploration, External cargo,
Forestry, general, Government contracting, Logging,
Patrol (power, pipeline, buried cable), Skiing
Helicopters: **1**-SL47

Publi Air
Grimbergen, Belgium

Public Service Company of Colorado
8645 Montview Boulevard
Denver, CO 80220
☎303-329-1032
President: C.K. Milier
Operations Manager: Frank E. Raglin
Chief Pilot: Robert B. Greeno
Pilot: Richard W. Van Dusen
Operations: Corporate (US part 91, not for hire),
Patrol (power, pipeline, buried cable)
Helicopters: **1**-206B,**1**-206L

Public Service Company of Indiana
1000 E. Main Street
Plainfield, IN 46168
☎317-838-1575
Director of Operations Support: Bob Fox
Chief Pilot: James F. Friday
Operations: Construction,
Corporate (US part 91, not for hire),
Executive transport, Forestry, general,
Patrol (power, pipeline, buried cable), Photography
Helicopters: **2**-206B

Public Service Company of New Mexico
Albuquerque, NM

Puerto Rico Electric Power
San Juan, Puerto Rico

***Puget Sound Helicopters Inc.**
8535 Perimeter Road South
Seattle, WA 98108
☎206-762-8273
President: Brendle Paul, II
Operations: Executive transport,
Law enforcement (for hire), Photography,
Repair station (FAA certified), Traffic surveillance
Helicopters: **1**-500D,**1**-280C,**1**-F28A

Pumpkin Air, Inc.
P.O. Box 1110
Addison, TX 75001-1110
☎214-233-6464 ☐511014
President: Hugo W. Schoellkopf, Jr.
Vice President/General Manager: Thomas M. Famirez
Director of Marketing: David Eagleston
Director of Operations: Lloyd Heckmann
Operations: Air taxi/charter (US part 135),
Electronic news gathering, EMS/air ambulance,
Executive transport, Exploration,
External cargo, Government contracting,
Offshore, Patrol (power, pipeline, buried cable),
Repair station (FAA certified)
Helicopters: **2**-S76A,**2**-B212,**3**-B412,
3-350D,**26**-206L,**21**-206B,**4**-B105,
2-222UT

Purnell Helicopter Service
Queensland, Australia

Pushpaka Aviation Private Ltd.
Bombay, India

Qatar Flying Centre
Doha, Qatar

Quad State Helicopter Service
King City, MO

Quasar Helicopters Ltd.
Abbotsford, BC, Canada

Queen Charlotte Helicopters Ltd.
Nanaimo, BC, Canada

Queen City Helicopters, Inc.
Seattle, WA

Quick Helicopters
Toledo, WA

Quincy Flying Service Inc.
Quincy, WA

Quinn Aviation
Paragould, AR

R & A Aviation Inc.
Clinton, MA

R & R Aviation
San Diego, CA

R & S Air Corporation
Somers Point, NJ

R & S Crop Dusters Inc.
Santa Maria, CA

R.A.C.A., S.A.
Buenos Aires, Argentina

R.I. Tel Copter Service Inc.
Hudson, IA

Manufacturer's key

HAI Code/Manufacturer		HAI Code/Manufacturer		HAI Code/Manufacturer	
12E4	Hiller	S62	Sikorsky	316B	Aerospatiale
H12D	Hiller	S64	Sikorsky	3160	Aerospatiale
H12E	Hiller	S70C	Sikorsky	318C	Aerospatiale
SL12	Soloy	S76A	Sikorsky	319B	Aerospatiale
UH12E	Soloy	S76B	Sikorsky	321J	Aerospatiale
R22	Robinson	B105	MBB	330J	Aerospatiale
F28A	Enstrom	B107	Boeing Vertol	330K	Aerospatiale
F28C	Enstrom	KV107	Kawasaki	330L	Aerospatiale
F28F	Enstrom	109A	Agusta	332C	Aerospatiale
WG30	Westland	BK117	Kawasaki	332J	Aerospatiale
BV44	Boeing Vertol	BK117	MBB	332L	Aerospatiale
47B	Bell	204B	Bell	341G	Aerospatiale
47D	Bell	205A	Bell	350B	Aerospatiale
47G	Bell	206A	Bell	350C	Aerospatiale
47G2	Bell	206B	Bell	350D	Aerospatiale
47G3	Bell	206L	Bell	355E	Aerospatiale
47G4	Bell	B212	Bell	355F	Aerospatiale
47G5	Bell	214B	Bell	360C	Aerospatiale
47H1	Bell	214ST	Bell	361	Aerospatiale
47J	Bell	B222	Bell	365	Aerospatiale
47J2	Bell	B234	Boeing Vertol	365N	Aerospatiale
47J3	Bell	269A	Hughes	B412	Bell
47K	Bell	280C	Enstrom	500A	Hughes
BV47	Boeing Vertol	280F	Enstrom	500C	Hughes
SL47	Soloy	280FX	Enstrom	500D	Hughes
S55T	Sikorsky	300B	Hughes	500E	Hughes
S58T	Sikorsky/California	300C	Hughes	1100	Fairchild
S61L	Sikorsky	313B	Aerospatiale	TCAT	Continental (Bell)
S61N	Sikorsky	315B	Aerospatiale	WASP	WASP

R.J. Monahan Helicopter
Bulverde, TX

R.M. Ag Air Inc.
Vail, IA

R.T.S. Helicopter Services
New York, NY

RCA Corporation
Mercer County Airport
Trenton, NJ 08628
☎609-882-3420 ☐642220
Director/Corporate Aviation: Anthony M. Penizotto
Chief Pilot: William C. Furey
Chief of Maintenance: William M. Meyer
Operations: Corporate (US part 91, not for hire),
Executive transport
Helicopters: **2**-S76A

REM Helicopters, Inc.
Harrisburg, PA

RV-Aviation
Helsinki, Finland

Ragland Helicopter Services
Houston, TX

Ragsdale Aviation
Austin, TX

Rainbow Air Service Corp.
Fort Lauderdale, FL

Rainbow Construction
Livoniz, MI

Rainbow Helicopters, Inc.
Peoria, IL

Raincross Helicopters
Riverside, CA

Ralston Purina Seafood
Tutilla American, Samoa

Rambling Rotors, Inc.
Route 2,
P.O. Box 2744
La Grande, OR 97850
☎503-963-5644
President: William L. Knight
Vice President: Kemit Knight
Operations: Agriculture,
Air taxi/charter (US part 135), Construction,
EMS/air ambulance, External cargo,
Fire control/support, Forestry, general,
Government contracting, Law enforcement (for hire),
Patrol (power, pipeline, buried cable),
Photography, Repair station (FAA certified),
Sightseeing, Skiing
Helicopters: **2**-206B, **1**-206L, **1**-350D

Ranger Aviation Inc.
Burnsville, MN

Ranger Helicopters Canada
Sault Sainte Marie, ON, Canada

Raven Helicopters, Inc.
Sitka, AK

Ray's Helicopters
Gillett, WY

Reavcom Services Inc.
Spring Valley Airport
Smith Road
Spring Valley, NY 10977
☎212-344-7920 ☐7105812436
President: Thomas E. Christman
Chief Pilot: Edwin W. Fuller, Jr.
Operations: Air taxi/charter (US part 135),
Bank paper transportation,
Corporate (US part 91, not for hire),
Executive transport, Photography
Helicopters: **1**-206B

Recon Air, Inc.
P.O. Box 815695
Dallas, TX 75381-5695
☎214-960-8600 ☐6502478623
President: C. Keith Thompson
Vice President: Timothy J. McKenna
Operations: Air taxi/charter (US part 135),
Exploration, Photography,
Pollution detection/monitoring,
Patrol (power, pipeline, buried cable)
Helicopters: **2**-206B

Red Roof Inns
2160 West Case Road
Columbus, OH 43220
☎614-876-3355
Director of Aviation: John Cirino
Operations: Corporate (US part 91, not for hire)
Helicopters: **1**-206L

Red Rose
Blackpool, England

Redd Mountain Helicopters Inc.
Mesa, AZ

Redding Air Service, Inc.
Municipal Airport *
6831 Airway Avenue
Redding, CA 96002
☎916-221-2851
President: J. Burt Train
Operations: Air taxi/charter (US part 135),
Fire control/support, Government contracting,
Patrol (power, pipeline, buried cable),
Forestry, general, Herding (stock & wildlife),
Repair station (FAA certified)
Helicopters: **3**-206B, **1**-47G3

Redstone Aero Services, Inc.
Walker Field
Grand Junction, CO 81506-8605
☎303-242-4923
President: John H. Linke
Operations: Air taxi/charter (US part 135),
External cargo, Forestry, general,
Government contracting,
Law enforcement (for hire), Sightseeing
Helicopters: **1**-369D

Reeder Air Inc.
Twin Falls, ID

Reeder Flying Service, Inc.
Route 2, Box 5300
Twin Falls, ID 83301-9617
☎208-733-5920
President: John W. Reeder
Vice President: Charles R. Reeder
Operations: Air taxi/charter (US part 135),
Construction, Executive transport,
Exploration, External cargo,
Fire control/support, Government contracting,
Patrol (power, pipeline, buried cable),
Photography, Sightseeing, Skiing
Helicopters: **5**-206B

Reef Air Transportation Corp.
Traverse City, MI

Reforestation Services, Inc.
5669 Commercial Street, S.E.
P.O. Box 3197
Salem, OR 97302
☎503-362-8322
President: G.E. Liming
Vice President: L.J. Liming
Mechanic: Lynn Ankrum
Operations: Agriculture,
Air taxi/charter (US part 135),
External cargo, Forestry, general,
Government contracting, Herding (stock & wildlife),
Patrol (power, pipeline, buried cable),
Repair station (FAA certified)
Helicopters: **5**-H12E

Rehnstrom Aero
Molle, Sweden

Reid's Helicopter
Riverside, CA

Renaissance Air, Inc.
Plymouth, MI

Renos Executive Air Inc.
Reno, NV

Rent A Bird Inc.
Las Vegas, NV

Rep Aviation Inc.
Bluefield, WV

Representaciones Latinos
Lima, Peru

Resorts International Airline, Inc. (RIA)
900 Lincoln Harbor Heliport
P.O. Box 789
Weehawken, NJ 07087
☎201-865-6900 ☐128166
General Manager: Matthew S. Zuccaro
Chief Pilot: Sanford Goldstein
Director of Maintenance: Robert Volpe
Operations: Air carrier (US part 127),
Air taxi/charter (US part 135),
Commuter air carrier (scheduled),
Corporate (US part 91, not for hire),
Executive transport, Sightseeing
Helicopters: **3**-S61N

Reunion Air Service
Saint Denis, Reunion

Revco Helicopters Inc.
Bishop, GA

Rex Aviation Ltd.
P.O. Box 51
Bankstown
New South Wales, 2200, Australia
☎02-700661 ☐AA 20738
General Manager: David Irons
Operations: Repair station (FAA certified),
Pilot training school, Mechanic training school,
Executive transport
Helicopters: **1**-300C, **1**-350B

Rex Budd Pty Ltd.
Queensland, Australia

Rhein-Ruhr Helicopter
Wegberg-Dalheim, West Germany

Rick Helicopters Inc.
Anchorage, AK

Ridder Air Enterprises Inc.
Whitman, MA

Rigel Aviation Enterprises Inc.
Willard, OH

Rio Verde Helicopters
Yuma, AZ

Ritel Copter Service, Inc.
Hudson, IA

River City Helicopters, Inc.
Carmichael, CA

Riverside Air Service
Riverside, CA

Riverside Casino
Laughlin, NV

Riverside Poice Department
Riverside, CA

Roberts Aircraft, Inc.
Casa Grande, AZ

Rockwell International
Hanford Operations
P.O. Box 800
Building 2721EA - 200 E. Area
Richland, WA 99352
☎509-373-1992
President: Paul G. Lorenzini
Chief, Hanford Patrol: Whitney C. Walker
Chief Pilot: Vernon L. Estes
Operations: Government contracting,
Government agency (not for hire),
Law enforcement (not for hire)
Helicopters: **2**-350D

Rockwell International Corp.
El Segundo, CA

Rockwell International Corp.
600 Grant Street
Pittsburgh, PA 15219
☎412-565-5814
Director/Flight Operations: K. L. Roloff
Chief Helicopter Pilot: Andrew Coster
Operations: Corporate (US part 91, not for hire)
Helicopters: **2**-355F, **1**-B222

Rocky Mountain Air
Great Falls, MT

---

* Indicates that complete membership application has been received and is now being processed in accordance with official HAI Bylaws.

For virtually any helicopter mission, Rogers wilco

For 21 years, Californians have said, "Rogers" for helicopter service.

Services include:

- Agriculture
- Ambulance/medevac
- Construction
- Executive transport
- Exploration
- External cargo
- Fire control/support
- Forestry
- Government contracting
- Offshore
- Herding
- Photography
- Patrol
- Pollution detection
- Sightseeing
- Heli-ski
- Traffic control
- TV
- Etc.

Rogers Helicopters is an FAA approved repair station, and factory authorized service facility for Aerospatiale, Bell and Hughes. With its large and varied fleet, Rogers Helicopters can meet your needs with the helicopter best suited to the task. For more information call or write:

Rogers Helicopters, Inc.
P.O. Box 4, 2403 Bullard
Clovis, Ca. 93613, 209-299-4903

Rocky Mountain Helicopters Inc.
P.O. Box 1337
Provo, UT 84603-1337
☎801-375-1124 ☐388378
President: James B. Burr
Vice President, Marketing: Floyd Heim
Operations Manager: Don Andrews
Chief Pilot: Larry Doll
Operations: Agriculture,
Air taxi/charter (US part 135), Construction,
Electronic news gathering, EMS/air ambulance,
Executive transport, Exploration,
External cargo, Fire control/support,
Forestry, general, Government contracting,
Herding (stock & wildlife),
Law enforcement (for hire), Logging,
Patrol (power, pipeline, buried cable),
Photography, Pilot training school,
Repair station (FAA certified), Skiing,
Traffic surveillance
Helicopters: **4**-214B, **1**-205A, **13**-315B,
15-316B, **6**-350D, **6**-350B, **7**-206B,
1-206L, **3**-355F

Rodgers Helicopter Service
Kearney, NE

Rodolfo Herrera-Llerandi
Guatemala, Guatemala

Rogers Helicopters, Inc.
P.O. Box 4
Clovis, CA 93613
☎209-299-4903 ☐176948
President: Robert H. Rogers
Executive Vice President: Wanda L. Rogers
Operations Manager: Robin M. Rogers
Chief Pilot: Richard P. Ambrosini
Operations: Agriculture, Air taxi/charter (US part 135),
EMS/air ambulance, Bank paper transportation,
Construction, Electronic news gathering,
Executive transport, Exploration,
External cargo, Fire control/support,
Forestry, general, Government contracting,
Herding (stock & wildlife), Offshore,
Patrol (power, pipeline, buried cable),
Photography, Repair station (FAA certified),
Sightseeing, Skiing
Helicopters: **1**-204B, **2**-350D, **1**-530F,
6-206B, **1**-206L, **1**-UH1B, **1**-B222, **1**-S62

Rogerson Aircraft
Irvine, CA

Ronson Aviation Inc.
Trenton, NJ

Rorer Group Inc.
500 Virginia Drive
Fort Washington, PA 19034
☎215-628-6400 ☐510-661-1306
President: Robert E. Cawthorn
V.P. Public Relations: Joseph H. Parsons, Jr.
Aviation Manager: Gary A. DiVincenzo
Operations: Corporate (US part 91, not for hire)
Helicopters: **1**-350D

Roszko Holdings Ltd.
Whitecourt, AB, Canada

Rotaflite
P.O. Box 288
Goondiwindi
Queensland, 4390, Australia
☎076711033 ☐AA48756
President: Samuel Coulton
Chief Pilot: David A. Lawton
Operations: Agriculture, Air taxi/charter (US part 135),
Executive transport, Exploration,
External cargo, Forestry, general,
Government contracting, Herding (stock & wildlife),
Patrol (power, pipeline, buried cable), Photography
Helicopters: **1**-206L

Rotafly, Inc.
Spokane, WA

Roto Flite Inc.
Wabash, IN

Roto Whirl, Inc.
Wabash, IN

Roto-Flite, Inc.
Edmonton, AB, Canada

Rotor Avia GmbH
Monchengladbach, West Germany

Rotor Club D'Annecy
Annecy Maythet, France

Rotor Connection
Novato, CA

HAI Seminars and Publications

Seminars

☐ Please send me information on HAI's 1986/1987 Management and Safety Seminar programs.

Publications

☐ Please send me a list of HAI's publications. (See page 198 for description of publications)

☐ Please send me a complimentary copy of the *Fly Neighborly Guide*. Enclosed, find a check for $3 for postage and handling.

Name ______________________ Title ______________

Company ______________________

Address ______________________

City ______________________ State ________ Zip ________

Country ______________________

Telephone ______________________ Telex/TWX ______________

No postage
necessary if mailed
in the United States

BUSINESS REPLY MAIL

FIRST CLASS PERMIT NO. 6948 Alexandria, VA

Postage will be paid by

Helicopter Association International
1619 Duke Street
Alexandria, VA 22314-3406

Helicopter Foundation International

☐ Please send me more information on the Helicopter Foundation International.

☐ Please contact me for a donation.

Name ______________________ Title ______________

Company ______________________

Address ______________________

City ______________________ State ________ Zip ________

Country ______________________

Telephone ______________________ Telex/TWX ______________

No postage
necessary if mailed
in the United States

BUSINESS REPLY MAIL
FIRST CLASS PERMIT NO. 6948 Alexandria, VA

Postage will be paid by

Helicopter Association International
1619 Duke Street
Alexandria, VA 22314-3406

HAI Directory Revision

Please correct my company's listing.

Company Name ____

Address ____

City ____________________________ State _________ Zip _________

Telephone __________________________ Telex _________________

Please make the following corrections:

____

____

____

____

No postage
necessary if mailed
in the United States

BUSINESS REPLY MAIL
FIRST CLASS PERMIT NO. 6948 Alexandria, VA

Postage will be paid by

Helicopter Association International
1619 Duke Street
Alexandria, VA 22314-3406

Rotor Hellas S.A.
Athens, Greece

Rotor Photo
Springwater, NY

Rotor Services Pty Ltd.
Winnellie, NT, Australia

Rotor Swing Inc.
Palatine, IL

Rotor Wing Inc.
Mount Olive, AL

Rotor Work Pty. Ltd.
Bankstown, NSW, Australia

Rotor-Aids Inc.
Oxnard, CA

Rotorflug GmbH
Friedrichsdorf, West Germany

Rototech Helicopters Limited
Surrey, BC, Canada

Rotorwork Helicopters (PNG)
WHP, New Guinea

Rouse Aviation Services Ltd.
Independence, MO

Rowco Inc.
San Antonio, TX

Rowley Aviation Ltd.
Amberly, New Zealand

Royal Brunei Malay Regiment
Brunei, Brunei

Royal Canadian Mounted Police
Ottawa, ON, Canada

Royal Helicopters, Inc.
216 Lagoon Drive
Honolulu,Oahu, HI 96819
☎808-836-2868
President: Ronald W. Thrash
Operations: Air taxi/charter (US part 135),
EMS/air ambulance, Construction,
Electronic news gathering,
Executive transport, External cargo,
Fire control/support, Government contracting,
Patrol (power, pipeline, buried cable),
Photography, Sightseeing
Helicopters: **1**-500C,**1**-300C

Royal Thai Customs
Bangkok, Thailand

Royalaire Co.
Hector, MN

Royale Helicopter Service, Inc.
P.O. Box 127
Burgettstown, PA 15021
☎412-947-3366
President: Barth Bartholomae
Operations: Air taxi/charter (US part 135), Construction,
Electronic news gathering, Executive transport,
Exploration, Forestry (general), Government contracting,
Patrol (power, pipeline, buried cable), Photography,
Pollution detection/monitoring, Sightseeing,
Traffic surveillance
Helicopters: **3**-206B

Rushmore Helicopters Inc.
Keystone, SD

Rutland Air Inc.
Ridge Spring, SC

Ryfas Heli Service BV
Hilversum, The Netherlands

S & S Chopper Service Inc.
Deerfield, MI

SAM Inc.
Twin Falls, ID

Sanagri-Serivcios Aeros de
Sanidade Agricolo Ltd.
Evora, Portugal

SCAC Transport International
Marignane, Cedex, France

SEMA
Pointe Noire, Congo

SFO Helicopter Airlines Inc.
Oakland, CA

SICAMA
Beaumont, France

SJA Aviation Inc.
Phillipsburg, PA

SONANGOL
Luanda, Angola

SP Luftbild GmbH
Bad Honnef, West Germany

Sabah Air Private Ltd.
Sabah, Malaysia

Saber Helicopters Inc.
San Antonio, TX

Sabine Offshore Services Inc.
Sabine Pass, TX

Sacramento County Sheriff
McClellan AFB, CA

Sacramento Helicopter Operations
Carmichael, CA

Safetycopters Inc.
Fairbury, IL

Salaika Aviation
Danbury, TX

Salt River Project
P.O. Box 1980
Phoenix, AZ 85001
☎602-236-2479
President: J.R. McNamara
Manager, Flight Operations: William F. Hines
Operations: Corporate (US part 91, not for hire),
Executive transport, External cargo,
Patrol (power, pipeline, buried cable)
Helicopters: **1**-206B

San Bernardino County Sheriff
Rialto, CA

San Diego County Sheriff's Department
El Cajon, CA

San Diego Police Department
San Diego, CA

San Joaquin Helicopters
Delano, CA

San Jose Police Department
San Jose, CA

San Miguel Corporation
Manila, Philippines

San Tan Dusters
Chandler, AZ

Sander Geophysics Ltd.
Kanata, ON, Canada

Santa Barbara Aviation
Goleta, CA

Santa Monica Police Department
Santa Monica, CA

Sarasota Air Service Inc.
Sarasota, FL

Saudi Arabian Airlines
Jeddah, Saudi Arabia

Dick Sawyer International, Inc.
Yukon, OK

Scenic Rotors, Inc.
Vernon, VT

Schiavone Construction Co.
1600 Paterson Plank Road
Secaucus, NJ 07094
☎201-867-5070
Chief Pilot: C. J. Harper
Operations: Air taxi/charter (US part 135)
Helicopters: **1**-206B,**1**-B222,**1**-B105

Schreiner Air Services Ltd
Port-of-Spain, Trinidad

Schreiner Airtaxi Argentine S.A.
Buenos Aires, Argentina

Schreiner Airways B.V.
Leiden, The Netherlands

Schuler Associates Inc.
Marshall, MI

Sea World Aviation
Main Beach, Qld., Australia

Joseph E. Seagram & Sons, Inc.
Hangar E
Westchester County Airport
White Plains, NY 10604
Chief Pilot: M.E. Paquette
Operations: Corporate (US part 91, not for hire)
Helicopters: **1**-109A

Sealmotive Inc.
P.O. Box 6003
Anchorage, AK 99502
☎907-243-1115 ☐026330
President: Al Gay
Vice President/Maintenance: Jim Quakenbush
Chief Pilot, Rotary Wing: Gary A. Wing
Operations: Air taxi/charter (US part 135),
Construction, Exploration, External cargo,
Fire control/support, Forestry, general,
Government contracting, Offshore,
Patrol (power, pipeline, buried cable),
Photography, Repair station (FAA certified), Sightseeing
Helicopters: **1**-B212,**3**-205A,**4**-206B

Sealand Helicopters Ltd.
P.O. Box 5188
Saint Johns, NF, A1C 5V5, Canada
☎709-576-4911 ☐016-3159
President: A. F. Soutar
Vice President, Operations: W.L. Stephens
J. C. Jones
Operations: Air taxi/charter (US part 135),
Construction, Executive transport,
Exploration, External cargo,
Fire control/support, Forestry, general,
Government contracting,
Herding (stock & wildlife), Offshore,
Patrol (power, pipeline, buried cable),
Photography, Repair station (FAA certified), Sightseeing
Helicopters: **1**-205A,**10**-206B,**7**-206L,
3-350D,**1**-355F,**7**-332C

Sears Roebuck and Company
5130 West 63rd Street
Chicago, IL 60638
☎312-585-1282 ☐25211
Chief Pilot: C.E. Smith
Operations: Corporate (US part 91, not for hire)
Helicopters: **1**-S76A

Secol-Eliadamello
Edolo, Italy

Secours Aeriens Francais
Courchevel, France

Secretaria de Programacion
Mexico, D.F., Mexico

Security Ford Tractor, Inc.
Baltimore, MD

Security Pacific National Bank
333 South Hope Street
P.O. Box 2097, Terminal Annex
Los Angeles, CA 90051
☎213-613-6023
Chairman & CEO: Richard J. Flamson
Vice President, Helicopter Division: William M. Rahn
Operations: Corporate (US part 91, not for hire)
Helicopters: **1**-206L

Selecta Aero Taxi Ltda.
Alameda Santos 1.357
30 Andar
Sao Paulo, 01419, Brazil
☎2840294 ☐1123084
Managing Director: Silveira Milton Malta
Operations Technical Manager: Roberto Ebert
Administrative Manager: Arthur Bellini Neto
Operations: Air taxi/charter (US part 135),
Bank paper transportation,
Executive transport, External cargo,
Fire control/support, Forestry, general,
Government contracting, Law enforcement (for hire),
Patrol (power, pipeline, buried cable),
Photography, Pollution detection/monitoring,
Repair station (FAA certified),
Sightseeing, Traffic surveillance,
Electronic news gathering
Helicopters: **2**-350B

Seminole Spraying Service Inc.
Seminole, TX

Service Contonal de la Protection Civile
Berne, Switzerland

Servicio Aereo Litoral Ltda.
Casilla 4014
Santiago, Chile
☎02-2259792 ☐240585
Managing Director: Folke Bergstrom
Operations Manager: Captain Luis Puebla
Operations: Agriculture, Air taxi/charter (US part 135),
EMS/air ambulance, External cargo,
Forestry, general, Offshore,
Patrol (power, pipeline, buried cable),
Sightseeing, Skiing
Helicopters: **2**-365/,**2**-316B

Shafter Aviation
Bakersfield, CA

Shamrock Coal Company
P.O. Box 130
Manchester, KY 40962
☎606-598-6151
Chief Pilot: Elmer R. Barbee
Operations: Corporate (US part 91, not for hire)
Helicopters: **1**-341G

Shanair Inc.
Visalia, CA

Shannon Executive Aviation Ltd
E. Ramp, Shannon Airport
County Clare, Ireland
☎061-61211 ☐24055
Managing Dir./Chief Pilot: Capt. B.A. Carpenter
Operations: Air carrier (US part 127),
Air taxi/charter (US part 135),
Bank paper transportation,
Commuter air carrier (scheduled),
Corporate (US part 91, not for hire),
Executive transport,
Patrol (power, pipeline, buried cable),
Photography, Pilot training school,
Repair station (FAA certified)
Helicopters: **1**-269B,**1**-222A

Sharkey's Helicrafts Inc.
West Lebanon, NH

Shawnee County Police Department
Topeka, KS

Shearer Sprayers
The Dalles, OR

Shearson Equipment Management Corp.
New York, NY

Shelby County Sheriff's Deptartment
Columbiana, AL

Shell Aircraft Limited
Cardinal Point, Newall Road
London (Heathrow) Airport
Hounslow, Middlesex, TW6 2AH, England
☎01-7594531 ☐919651
Managing Director: C.R. Moss
Operations: Corporate (US part 91, not for hire),
Executive transport, Offshore
Helicopters: **4**-S61N

Shell Oil Company
P.O. Box 60828
Houston, TX 77205
☎713-443-3881 ☐76-2248
Manager Corporate Aviation: David L. Pease
Transportation Rep./Contract Flight Ops.:
William W. Stiles
Transportation Rep./Contract Flight Ops.:
W.W. Diamond
Operations: Corporate (US part 91, not for hire)
Helicopters: **1**-206L

Shelton Ranches Inc.
Kerrville, TX

Shikoku Air Service Co. Ltd.
Kagawa, Japan

Shin-Nihon Helicopter Co. Ltd.
Tokyo, Japan

Shy Flyers Inc.
Castle Rock, CO

Signal Engineered Products
Manchester, NH

Siller Bros., Inc.
Aviation Division
1250 Smith Road
Yuba City, CA 95991
☎916-674-9460
Operations Manager: Neal Siller
Chief Pilot: Scott A. Baker
Director of Maintainence: Phillip W. Ramirez
Operations: Construction, Exploration,
External cargo, Forestry, general,
Government contracting, Logging
Helicopters: **1**-206B,**1**-500D,**2**-S64E,
2-S61N,**4**-SL12,**1**-SL47

Sim Air USA Ltd.
Scottsdale, AZ

Simplex Time Recorder Co.
1 Simplex Plaza
Gardner, MA 01441
☎617-632-2500
Chief Pilot: Philip M. Taylor
Operations: Corporate (US part 91, not for hire)
Helicopters: **1**-206L

Simpson Aviation Inc.
Spring, TX

Sirocco Aviation Corp.
Linden, NJ

Skogsflyg/Cassel Aero AB
Arnasvall, Sweden

Sky 5 Inc.
Raleigh, NC

Sky AG Services Inc.
Tracy, CA

Sky Copters Inc.
Ulysses, KS

Sky Flite Inc.
Tulsa, OK

Sky Lark Helicopters, Inc.
Miami, FL

Sky Surveyor Inc.
Cincinnati, OH

Skycopters
Sun Valley, CA

Skyflite Inc.
Tulsa, OK

Skyhawk Helicopter Service Inc
Minersville, UT

Skyline Crane Service Inc.
Las Vegas, NV

Skyline Helicopters
Hoquiam, WA

Skyline Industries, Inc.
Fort Worth, TX

Skyline International Aviation
Athens, Greece

Skyrider Aviation Inc.
Laredo, TX

Skytel Helicopters Inc.
Fort Lauderdale, FL

Skyway Air Services Ltd.
Langley, BC, Canada

Skyway Helicopters Inc.
Davenport, IA

Sleigh/Schreiner-KLM
Melbourne, Victoria, Australia

Sloane Helicopters, Ltd.
London, England

Dick Smith Adventure Pty. Ltd.
P.O. Box 321 Terrey Hills 2084, Australia
☎02-450-2344 ☐AA176203
Managing Director: Dick Smith
Operations: Private Owners
Corporate (US Part 91, not for hire),
Helicopters: **1**-206B

Smith Helicopters Inc.
McCoy, TX

Snake River Helicopters Inc.
Lind, WA

Snohomish County Sheriff
Everett, WA

South Texas Helicopter Service
Brackettville, TX

Soderala Flyg AB
Sooderhamn, Sweden

Sonoma County Sheriff's Department
Helicopter/SAR Bureau
600 Administration Drive
Santa Rosa, CA 95401
☎707-527-9595
Unit Supervisor: Sgt. Dave Nagle
Observer: Deputy George Converse
Pilot: Gary E. Lott
Pilot: Tom McConnel
Operations: EMS/air ambulance,
Government agency (not for hire),
Law enforcement (not for hire)
Helicopters: **1**-206B

Sony Corporation of America
Teterboro, NJ

South Carolina Aeronautics Commission
Drawer 1987
Columbia, SC 29202
☎803-758-2766
Director: John Hamilton
Assistant to Director: Alan Alexander
Maintenance Supervisor: Rex Dula
Pilot: Edward A. Harney
Operations: Government agency (not for hire),
Law enforcement (not for hire)
Helicopters: **1**-B206

South Carolina Helicopters Inc.
Saluda, SC

South Carolina Pipeline Corp.
P.O. Box 6317
Columbia, SC 29260
☎803-788-3220
President/CEO: Max Earwood
V.P. Marketing/Sales: B.J. MacInnis
Aviation Dept. Mgr.: James T. Breznay
Operations: Corporate (US part 91, not for hire),
Executive transport,
Patrol (power, pipeline, buried cable)
Helicopters: **1**-206L

South Coast Inc.
Ketchikan, AK

South East Whirly Birds Inc.
New Canaan, CT

South Sea Helicopters, Inc.
P.O. Box 1445
Lihue, HI 96766
☎808-245-7781
President: Paul D. Asmus
Vice President: Geraldine Asmus
Operations Manager: JoAnn Hamilton
Chief Pilot: Arthur Bradbury
Operations: Air taxi/charter (US part 135),
Executive transport, External cargo,
Forestry, general, Government contracting,
Photography, Sightseeing
Helicopters: **2**-206B

South Tucson Police Department
Tucson, AZ

South West Helicopters, Ltd.
Taupo, New Zealand

Southeast Mississippi Air
Ambulance Service Hattiesburg, MS

Southern Aero Corporation
Ozark, AL

Southern Air Ltd.
Sussex, England

Southern California Edison Co.
7000 Merrill Avenue
Chino Airport - Box 33
Chino, CA 91710
☎714-597-1881
President: Howard Allen
Operations Manager: Robert C. McGuire
Chief Pilot: Robert D. Cloud
Chief of Maintenance: Gorden Hodges
Operations: Construction,
Corporate (US part 91, not for hire),
Executive transport, Exploration,
External cargo, Offshore,
Patrol (power, pipeline, buried cable),
Photography, Pollution detection/monitoring
Helicopters: **2**-500C,**1**-500D,**2**-350D,
1-500E

Southern Company Services, Inc.
Chamblee, GA

Southern Gulf Helicopter Services
Maurice, AL

Southern Helicopters Inc.
Ozark, AL

Southern Helicopters Ltd.
Gore, Southland, New Zealand

Southern Wings Inc.
Bethany, OK

Southland Helicopters Inc.
Long Beach, CA

Southwest Flying Service
Nodaway, IA

Southwest Helicopters, Inc.
Tuscon, AZ

Southwest Skyways Inc.
Torrance, CA

Southwind Helicopters Inc.
Sandpoint, ID

Southwind Helicopters Inc.
Lafayette, LA

Spirit Airways/HelicopTours
San Francisco, CA

Spruce Mountain Helicopters
Patton, PA

Sri Kinabalu SDN. BHD.
Kuala Lumpur, Malaysia

Sri Lanka Air Force Helitours
Colombo, Sri Lanka

St. Bernard Parish Sheriff
Meraux, LA

St. Louis County Police Department
Chesterfield, MO

St. Louis Helicopter Airways, Inc.
P.O. Box 809
Chesterfield, MO 63017-8809
☎314-532-1177
President: John R. Murphy
V.P. Marketing/Sales: Larry Corbin
Operations: Air taxi/charter (US part 135),
Construction, Electronic news gathering,
EMS/air ambulance, Executive transport,
External cargo, Government contracting,
Photography, Pollution detection/monitoring,
Traffic surveillance
Helicopters: **4**-S58A,**3**-206L,**1**-B105,
1-350D

St. Maries Helicopter Service
Saint Maries, ID

St. Tammany Parish Sheriff
Slidell, LA

Standard Oil Company of Indiana
5901 S. Center Avenue
Chicago, IL 60638
☎312-856-6667 ☐9102210111
Chief Pilot: A.B. Lane
Chief Pilot: Tom Jacques
Operations: Corporate (US part 91, not for hire)
Helicopters: **1**-355E,**1**-206B

Star Aviation
London, England

Star Aviation
Orlando, FL

State of Alaska
Anchorage, AK

State of New York Aviation
Albany County Airport
Albany, NY 12211
☎518-457-1200
Director of Aviation: Vincent E. O'Brien
Operations: Government agency (not for hire),
Executive transport, Fire control/support,
External cargo, EMS/air ambulance,
Pollution detection/monitoring, Forestry, general
Helicopters: **1**-204B,**1**-B212,**1**-S76A

Statflight
Gainsville, FL

Sainte Georges Montagnat
Noumea, New Caledonia

Sainte Kaaf Agro Aviation
Paris, France

Stephens Helicopter Service
Climax, GA

Sterner Aero AB
P.O. Box 8302
S-781 08, Borlange, Sweden
☎243-333-20 ☐74033
President: Bo Sterner
Vice President: Goran Edgren
Technical Manager: Claes Pettersson
Chief Pilot: Anders Hagberg
Operations: Agriculture,
Air taxi/charter (US part 135), Construction,
EMS/air ambulance, External cargo,
Fire control/support, Forestry, general,
Logging, Mechanic training school,
Patrol (power, pipeline, buried cable),
Photography, Pilot training school, Sightseeing, Skiing
Helicopters: **5**-300C,**1**-500D,**1**-206B,
3-205A,**3**-350B

Steuart Petroleum Co.
4646 40th Street, N.W.
Washington, DC 20016
☎202-537-8900
President: Guy Steuart
Chief Pilot: Art Blomgren
Chief Helicopter Pilot: Gary Effers
Operations: Corporate (US part 91, not for hire)
Helicopters: **1**-350D

Stevens Aviation
Salina, KS

Stevenson Construction Co.
Altamont, UT

Stieren Air AG Inc.
Glenville, MN

Strand Aviation Inc.
Kalispell, MT

Strongsville Police Department
Strongsville, OH

Stuart Helicopter
Tequesta, FL

SuWest Airways, Inc.
211 Carondelet Street
New Orleans, LA 70130
☎504-588-2851
Secretary/Treasurer: Paul T. Westervelt Jr.
Operations: Air taxi/charter (US part 135),
Construction, Corporate (US part 91, not for hire),
Electronic news gathering, Executive transport,
Forestry, general, Government contracting,
Law enforcement (for hire), Offshore,
Patrol (power, pipeline, buried cable), Photography,
Pollution detection/monitoring, Private owners,
Repair station (FAA certified), Sightseeing
Helicopters: **3**-206B

Suffolk County Police Department
Ronkonoma, NY

Sulenta Construction Co., Inc.
Pinedale, WY

Summers Helicopter Service
Linesville, PA

Summit Helicopters, Inc.
P.O. Box 38
Cloverdale, VA 24077
☎703-992-5577
President: Carl N. Milko
Vice President of Operations: James C. Carlton
Vice President of Marketing/Sales: Bill McAlister
Vice President of Maintenance: Alan W. Sohler
Operations: Agriculture, Air taxi/charter (US part 135),
Construction, Executive transport, Fire control/support,
Forestry, general, Government contracting,
Patrol (power, pipeline, buried cable), Photography
Helicopters: **2**-206B,**4**-12E4

Sun Ray Helicopters Inc.
Fort Lauderdale, FL

Sunair Copters, Inc.
Kahului, Maui, HI

Sunbelt Flyers Inc.
Moultrie, GA

Sunbelt Helicopters Inc.
Mineral Wells, TX

Sunbird Aviation Ltd.
Calgary, AB, Canada

Suncoast Helicopters Inc.
Tampa, FL

Sundance Helicopters, Inc.
Boulder, CO

Sunnyside Enterprises Inc.
Vermilion, OH

Sunrise Helicopters 3
Los Angeles, CA

Sunset Aviation
American Falls, ID

Sunshine Coast Rescue Helicopter
Nambour, Qld., Australia

Sunshine Copters
Circle, AK

Superior Helicopter Service
Woodland, CA

Superior Helicopters, Inc.
Corpus Christi, TX

Superstition Air Service Inc.
Mesa, AZ

Sutter County Sheriff
Yuba City, CA

Swedair AB
Stockholm, Sweden

Swing Wing, Inc.
Veerdersburg, IN

Swiss Air-Rescue (REGA)
Mainaustrasse 21
8008, Zurich, Switzerland
☎01-385-8585 ☐815815
Chief Executive Officer: Dr. Christian Buhler
V.P. Public Relations: Diethelm Ryffel
Operations: EMS/air ambulance,
Law enforcement (for hire),
Repair station (FAA certified)
Helicopters: **11**-319B,**3**-B105

T & H Airways
Costa Mesa, CA

TAM-Transports Aeriens Medites
La Bocca, France

TGR Helicopters
Redding, CA

TLI Charters, Inc.
Ridgefield Park, NJ

TWT Exploration
Park City, UT

Table Rock Helicopters Inc.
Branson, MO

Tagum Agricultural Development
Manila, Philippines

Taiyo Aviation
Gumma, Japan

Tamarac Helicopter Corp.
Evansville, MN

Tamiami Helicopters Inc.
Miami, FL

Tampa Police Department
Tampa, FL

Tarnutzer-Hamilton Airways
Costa Mesa, CA

Teck Explorations Ltd.
Toronto, ON, Canada

Tel AG Service
Cottonport, LA

Telles Ranch, Inc.
Firebaugh, CA

Telstar Transports, Inc.
Lancaster, TX

Temsco Helicopters, Inc.
P.O. Box 5057
Ketchikan, AK 99901
☎907-225-5141 ☐099-55204
President: Kenneth C. Eichner
Operations Manager: Charles W. Gale
Chief Pilot: George O. Chipman
Chief of Maintenance: William Hornbaker
Operations: Air taxi/charter (US part 135), Construction, Corporate (US part 91, not for hire), EMS/air ambulance, Executive transport, Exploration, External cargo, Fire control/support, Forestry, general, Government contracting, Logging, Offshore, Patrol (power, pipeline, buried cable), Repair station (FAA certified), Sightseeing
Helicopters: **1**-B212,**2**-350B,**24**-500D, **6**-500C,**2**-B204

Tenneco, Inc.
16951 JFK Boulevard
Houston, TX 77032
☎713-757-8107 ☐792-839
Manager, Rotorwing Flight Operations: F.L. Clough
Operations: Corporate (US part 91, not for hire), Offshore, Patrol (power, pipeline, buried cable)
Helicopters: **3**-206B,**12**-B105,**1**-350B

Tennessee Valley Authority
Muscle Shoals, AL

Terminal Airways Corp.
Woodridge, NJ

Terr-Air Rotary
(Territorial Airways) Limited
P.O. Box 688
Lac la Biche, AB, T0A 2C0, Canada
☎403-623-2140
President: Douglas MacPherson
V.P. Marketing/Sales: Steve Harrison
Chief Pilot: Pieter Koster
Operations: Air carrier (US part 127), Air taxi/charter (US part 135), Construction, EMS/air ambulance, Executive transport, Exploration, External cargo, Fire control/support, Forestry, general, Government contracting, Logging, Sightseeing
Helicopters: **4**-500D,**2**-206B,**1**-S58T

Terra Helicopters Inc.
McMinnville, OR

Teryjohn Aviation
Saint Peter, MN

Tex-Star Aviation, Inc.
Houston, TX

Texas Business Helicopters
Austin, TX

Texas Department of Public Safety
Austin, TX

Texas Flight Service Inc.
Fort Worth, TX

Texas Gulf Helicopters
Sabine Pass, TX

Texas Helicopter Co. Inc.
Irving, TX

Textron, Inc.
Textron Aircraft Department
T.F. Green Airport
Warwick, RI 02886
☎401-421-2800
Chief Executive Officer: Robert P. Straetz
President: Beverly F. Dolan
Chief Pilot: Robert M. Brunelle
Operations: Executive transport, Private owners
Helicopters: **1**-B222,**1**-206L

Barron Thomas Aviation, Inc.
Dallas, TX

Thomas Helicopters Inc.
Gooding, ID

Thompson & Green Machinery Co., Inc.
1245 Firestone Boulevard
Lavergne, TN 37086
☎615-256-2424
Chief Pilot: Gregory A. Simpson
Operations: Air taxi/charter (US part 135), Corporate (US part 91, not for hire)
Helicopters: **1**-500D

Thomson Helicopter Inc.
Manhasset, NY

Thomson Industries, Inc.
Channel Drive
Port Washington, NY 11050
☎516-883-8000 ☐PTWN 6852347
President: John B. Thomson, Jr.
Manager, Flight Department: Richard L. Peck
Captain, Flight Department: Keith J. Fritz
Director of Maintenance: Robert Petty
Operations: Air taxi/charter (US part 135), Corporate (US part 91, not for hire), Executive transport
Helicopters: **1**-S76A,**1**-1100

Thoroughbred Helicopter
Lexington, KY

Three Rivers Flying Service
San Angelo, TX

Thunderbird Helicopters Inc.
Escalon, CA

Thunderbird Helicopters, Inc.
Montrose, CO

Thunderbird Helicopters, Inc.
Stateline, NV

Tigerair Inc.
Burbank, CA

Tiller Helicopter Service Inc.
Route 1, Box 300A
Alice, TX 78332
☎512-664-6453
President: William J. Tiller
Operations: Agriculture, Air taxi/charter (US part 135), Bank paper transportation, Government contracting, Herding (stock & wildlife), Law enforcement (for hire), Patrol (power, pipeline, buried cable), Photography, Repair station (FAA certified)
Helicopters: **3**-47G4,**2**-47G5,**1**-SL47,**1**-WASP

Timberline Aviation Co., Inc.
Pinedale, WY

Time Air Inc.
Waterbury, CT

Time Choppers Ltd.
London, England

Time Machines, Inc.
Maurice, LA

Timo R-Koneistus
Kerava, Finland

Toho Air Service Co. Ltd.
Tokyo, Japan

Top Flight Helicopters Inc.
Naselle, WA

Toronto Helicopters, Ltd.
Markham, ON, Canada

Torrance Police Department
Torrance, CA

Totem Air Ltd.
Grand Prairie, AB, Canada

Townsend Agricultural Service Inc.
Crowley, WY

Toxotis Ltd.
Athens, Greece

Trade-A-Plane International
Victoria, Australia

Tradewinds Helicopters Ltd.
Surrey, England

Tradewing Helicopter Inc.
Lafayette, LA

Trafficopters Inc.
Indianapolis, IN

Trans Exec Air Service, Inc.
Santa Monica, CA

Trans Maritimes Helicopters
Oromocto, NB, Canada

Trans North Turbo Air Ltd.
Whitehorse, YK, Canada

Trans Rotor Inc.
Newcomerstown, OH

Trans-Air, Inc.
Traverse City, MI

Trans-Alaska Helicopters, Inc.
819 Orca Street
Anchorage, AK 99501
☎907-274-7762 ☐25236
President: Richard C. Sweezey
Vice President: Don M. Ward
Chief Pilot: Herb A. Downs
Operations: Air taxi/charter (US part 135), Construction, Exploration, External cargo, Fire control/support, Forestry, general, Government contracting, Patrol (power, pipeline, buried cable), Repair station (FAA certified), Sightseeing
Helicopters: **6**-206B,**2**-206L,**1**-205A

Trans-Canada Helicopters Ltd.
Les Cedres, PQ, Canada

Trans-Exec Air Service, Inc.
Santa Monica, CA

TransWestern Helicopters, Inc.
Scappoose, OR

Transco Energy Company
P.O. Box 60974
Houston, TX 77205
☎713-439-4236
President: W.J. Bowen
Director of Aviation: Von A. Campbell
Manager, Helicopter Operations: Bennie J. Shields
Maintenance Manager: Bobby J. Richey
Operations: Corporate (US part 91, not for hire), Offshore
Helicopters: **3**-206B,**20**-355F

Transport Canada
Ottawa, ON, Canada

Transportes Aero Pegaso
Mexico, D.F., Mexico

Transrapid Helitur
Istanbul, Turkey

The Travelers Corporation
1 Tower Square
Hartford, CT 06183
☎203-277-3693 ☐643841
Second Vice President: John F. Sheehan
Operations: Corporate (US part 91, not for hire)
Helicopters: **1**-S76A

Travenol Laboratories, Inc.
Helicopter Department
P.O. Box 678
Carolina, Puerto Rico 00630
☎809-762-0050 ☐345-5098
Vice President/General Manager: James H. Taylor
Pilot: Freddie Cortes
Manager, Flight Operations: Eugene Higgins
Operations: Corporate (US part 91, not for hire), Executive transport
Helicopters: **1**-B105

Trent Air Ltd.
Peterborough, ON, Canada

Trent Air Services Ltd.
Beds, England

Tri City Helicopters
Mesa, AZ

Tri County Copters
Monte Rio, CA

Tri State Helicopter Inc.
Donaldsonville, GA

Tri-Western Helicopter Corp.
Cassidy, BC, Canada

Triad America International
3916 State Street
Suite 200
Santa Barbara, CA 93105
☎805-687-4882 ☐757074
Pilot: James H. Frye
Operations: Executive transport
Helicopters: **1**-500E

Triad Helicopters, Inc.
P.O. Box 5071
Winston-Salem, NC 27103
☎919-767-4057
President: Curtis H. Blackwell
V.P. Marketing/Sales: James Whittington
Chief Pilot: Thomas Hatcher
Operations: Air taxi/charter (US part 135), Electronic news gathering, Executive transport, Exploration, Photography, Pilot training school, Sightseeing, Traffic surveillance
Helicopters: **3**-206B,**1**-269C,**1**-206L

Triangle Copter Service Inc.
Wichita, KS

Tropical Airways, Inc.
Manila, Philippines

Tropical Helicopter Airways Inc.
950 MacArthur Causeway
Miami, FL 33132
☎305-374-6055
Chairman: William Ter Keurst
President: Reed Phillips
Vice President: William Ter Keurst, Jr.
Operations: Air taxi/charter (US part 135),
Bank paper transportation,
Commuter air carrier (scheduled),
Repair station (FAA certified),
Executive transport, External cargo,
Electronic news gathering, Government contracting,
Law enforcement (not for hire),
Patrol (power, pipeline, buried cable),
Photography, Pilot training school,
Sightseeing, Traffic surveillance
Helicopters: **1**-206L,**1**-206B,**1**-500D

Tucson Pima County
Tucson, AZ

Tucson Police Department
Air Support Unit
6666 South Plummer Avenue
Tucson, AZ 85706
☎602-791-4142
Supervisor - Air Support Unit:
Sgt. Doug Russell
Training Ofc.: Tim Clark
Safety Ofc.: Scott Erickson
Operations: Government agency (not for hire)
Helicopters: **2**-206B

Tundra Copters
P.O. Box 60670
Fairbanks, AK 99706
☎907-452-5429 ☐090-35464
President: Paul R. Briles
General Manager: Craig V. Fielding
Chief Pilot: Thomas L. Smith
Operations: Air taxi/charter (US part 135),
Construction, Exploration, Government contracting
Helicopters: **5**-500D,**2**-206B,**2**-206L

Tunisavia
L-Ariana, Tunisia

Tuolumme County Sheriff
Sonora, CA

Turbine Conversions, Ltd.
Auckland, New Zealand

Turistflyg I Aerjeplog AB
Arjeplog, Sweden

Turner Copter Service Inc.
Elliott, IA

Twinn Pone Sales & Service
Pennington, NJ

Ty-Tua Inc. - Aviation Services
Subsidiary of Smith Industries
8402 Nelms
Houston, TX 77061
☎713-644-1081
Chairman of the Board: Tyson Smith
President: John L. Pittman, Jr.
Operations: Air taxi/charter (US part 135),
Executive transport
Helicopters: **1**-206L,**1**-206B

U.S. Border Patrol
Tucson, AZ

U.S. Border Patrol
Yuma, AZ

U.S. Border Patrol
El Centro, CA

U.S. Border Patrol
Fresno, CA

U.S. Border Patrol
San Ysudri, CA

U.S. Border Patrol
El Paso, TX

U.S. Border Patrol
Marfa, TX

U.S. Coast Guard
Opa Locka, FL

U.S. Customs Service
San Diego, CA

U.S. Customs Service
Pensacola, FL

U.S. Customs Service
El Paso, TX

U.S. Customs Service
San Antonio, TX

U.S. Customs Service
Tomball, TX

U.S. Fish & Wildlife
Nome, AK

U.S. Fish & Wildlife Service
Springfield, IL

U.S. Fish & Wildlife Service
Hanover, MD

U.S. Helicopters, Inc.
Marshville, NC

U.S. Jet Aviation, Inc.
Washington National Airport
General Aviation Terminal
Washington, DC 20001
☎703-892-6200 ☐901854
President: William J. McKenna, Jr.
Vice President: Troy L. Mashburn
Director Rotorcraft Operations: Richard T. Chitti
Director of Maintenance: Michael Weber
Operations: Air taxi/charter (US part 135),
EMS/air ambulance, Repair station (FAA certified),
Executive transport, Electronic news gathering,
Government contracting, Law enforcement (for hire),
Photography, Sightseeing
Helicopters: **3**-B117,**1**-350D

U.S. National Park Service
Manteo, NC

U.T. LIFESTAR, Aeromedical Services
University of Tennessee
Memorial Research Center & Hospital
Drawer 81
1924 Alcoa Highway
Knoxville, TN 37920
☎615-544-9112
Director, Aeromedical Services: Dr. Robert F. Lash
Chief Pilot: Dan E. Norman
Operations: EMS/air ambulance
Helicopters: **1**-B222

UCLA Medical Center
Los Angeles, CA

UP Aviation
Chateau Fort, France

Ueding Fying Service
Vincennes, IN

Uncompagre Helicopters Inc.
Duray, CO

Uni Air
Blagnac, France

Uni-Fly
Randers, Denmark

Unifly
Rome, Italy

Union Helicopters Ltd.
Delta, BC, Canada

United Helicopters, Inc.
Oroville, CA

United Pilots A/S
Rosklide, Denmark

United States Park Police
Washington, DC

United States Steel Corporation
Aircraft Division
Greater Pittsburgh International Airport
P.O. Box 12345
Pittsburgh, PA 15231-0345
☎412-433-4833
Chief Helicopter Pilot. Capt. Edward J. Grabski
Operations: Corporate (US part 91, not for hire)
Helicopters: **1**-109A

United Technologies Corporation
Corporate Aircraft Deptartment
Rentschler Airport
East Hartford, CT 06108
☎203-728-7000 ☐966478
Director of Aircraft Operations:
Wesley R. Holder
Helicopter Administrator: James A. Williams
Chief Pilot: Charles E. White
Operations: Corporate (US part 91, not for hire)
Helicopters: **2**-S76A

United Telephone Company
of the Northwest
601 State Street
Hood River, OR 97031
☎503-386-0374
Chief Pilot/Mechanic: Ronald W. Wilkins
Operations: Corporate (US part 91, not for hire)
Helicopters: **1**-206L

Universal Helicopters
Gander, NF, Canada

Universal Helicopters
Reno, NV

University of North Dakota Center
for Aerospace Studies
P.O. Box 8216
University Station
Grand Forks, ND 58202-8216
☎701-777-2791 ☐910-6738382
President: Thomas Clifford
Dean: John D. Ogegard
Director, Fiscal Affairs: Robert L. Reis
Asst. Professor & Chief Instructor of
Rotorcraft Programs: Robert White
Operations: Corporate (US part 91, not for hire),
Executive Transport, Government agency (not for hire),
Pilot training school
Helicopters: **3**-300C,**1**-500E

University of Tennessee
Knoxville, TN

Upali Travels Limited
Colombo, Sri Lanka

Upton Air Services, Inc.
Broussard, LA

Uranio Mexicana
Mexico, D.F., Mexico

Utilities Services of America
Hollywood, FL

Utility Helicopters Ltd.
Nelson, New Zealand

V.C. Helicopters S.A
Sint-Pieters-Leeuw, Belgium

VIP Helicopters
Gillette, WY

Valicopters Inc.
Buena, WA

Valley Air Inc.
Highland, KS

Valley Aviation
Orofino, ID

Valley Helicopter Service
Clarkston, WA

Valley Helicopters
Linden, CA

Valley Sprayer & Duster Service
Sun City, AZ

Tom Van der Meuten
Oostwold, The Netherlands

Van Wechel Farms, Inc.
Vinton, IA

Vancouver Island Helicopters Ltd.
No. 1 - 9600 Canora Road
Sidney, BC, V8L 4R1, Canada
☎604-656-3987
President: Alfred Stringer
Operations Manager: Donald Honeyman
Chief Engineer: Barry J. Hewko
Operations: Construction, EMS/air ambulance,
Executive transport, Exploration, External cargo,
Fire control/suoport, Forestry, general,
Patrol (power, pipeline, buried cable),
Photography, Pilot training school,
Repair station (FAA certified)
Helicopters: **8**-206B,**5**-206L,**1**-500D,**1**-204B

Venison Traders Ltd.
Auckland, New Zealand

Ventura County
Camarillo, CA

Veritair Ltd.
South Glamorgan, Wales

Vernon Helicopters Ltd.
Site 2, Comp. 1
Rural Route 4
Vernon, BC, V1T 6L7, Canada
☎604-542-6000
President: Richard K. Biggs
Operations: Air carrier (US part 127),
Construction, Executive transport,
Exploration, External cargo,
Fire control/support, Forestry, general,
Government contracting,
Patrol (power, pipeline, buried cable)
Helicopters: **2**-206B

Verreault Helicopters Inc.
Gatineau, PQ, Canada

Versatile Air Services Limited
North Sydney, NS, Canada

Versatile Helicopters, Inc.
Ardmore, OK

Verticare
P.O. Box 5127
Salinas, CA 93915-5127
☎408-422-0685 ☐9103802569
President: James T. Cheatham
Operations: Agriculture, Air carrier (US part 127),
Air taxi/charter (US part 135), Construction,
Exploration, External cargo,
Fire control/support, Forestry, general,
Herding (stock & wildlife),
Patrol (power, pipeline, buried cable),
Photography, Sightseeing, Skiing
Helicopters: **1**-UH1B,**2**-500D,**2**-UH12

Vertiflite Air Service Inc.
Maryville, TN

Vicksburg Police Department
Vicksburg, MS

Victoria Police Air Wing
Victoria, Australia

View Top Corporation
Westchester County Airport
White Plains, NY 10604
☎914-428-8780
Chief Pilot: Russell Swanson
Chief Helicopter Pilot: W. Ward Gill
Chief of Maintenance: Robert Manson
Operations: Corporate (US part 91, not for hire)
Helicopters: **1**-109A

Viking Helicopters, Ltd.
400 Cite des Jeunes Boulevard
Saint Clet, PQ, J0P 1S0, Canada
☎514-455-5687 ☐05-25196
President: Claude Provost
General Manager: G. Delaney
Chief Pilot: L. Meslin
Operations: Construction,
Corporate (US part 91, not for hire),
EMS/air ambulance, Executive transport,
Exploration, External cargo,
Fire control/support, Forestry, general,
Government contracting, Logging,
Patrol (power, pipeline, buried cable),
Photography, Skiing
Helicopters: **50**-500D,**10**-500C,**3**-B212,
2-315B,**6**-206B,**2**-206L

Villa Banfi
1111 Cedar Swamp Road
Old Brookville, NY 11545
☎516-626-9200 ☐127379
Chairman of the Board: John Mariani
President: Harry Mariani
Chief Pilot: Walton Marshall
Operations: Corporate (US part 91, not for hire)
Helicopters: **1**-350B

Virgin Island Air Service
Las Vegas, NV

Virginia Beach Police Department
Virginia Beach, VA

Virginia State Police
Salem, VA

Visco Flying Co. Inc.
Imperial, CA

Vivian Ann Fishing, Inc.
San Diego, CA

Volusia County Sheriff
Deland, FL

Voss International Corporation
Long Beach, CA

Votec Servicios Aereos Regionais S.A.
Av. Franklin Roosevelt, 137
Andar 11
Rio de Janeiro, 20021, Brazil
☎021-292-6611 ☐21664
Superintendent/Director: Tor Kameyama
Technical Director: Alexandre Silva
Commercial Director: Paulo Buarque de Macedo
Commercial Manager: Fabio de Oliveira
Operations: Agriculture, Air taxi/charter (US part 135),
Commuter air carrier (scheduled),
Construction, External cargo, Offshore,
Patrol (power, pipeline, buried cable),
Photography, Sightseeing
Helicopters: **4**-S61N,**3**-S58T,**8**-S76A,
7-500D,**7**-500C

Vowell Air Services (Helicopters) Pty. Ltd.
Tyabb, Victoria, Australia

W. I. Clark Co.
Wallingford, CT

WBNS-TV Inc.
Columbus, OH

WIKING Helikopter Service GmbH
Postfach 30 55 70
D-200 Hamburg, 36, West Germany
☎44-19-13-50 ☐21700840
Managing Director: Rolf Schneider
Operations Manager: Udo Jahn
Chief Pilot: Josep Blochl
Technical Manager: Horst Voight
Operations: Agriculture, Executive transport,
Exploration, External cargo,
Forestry, general, Government contracting,
Offshore, Patrol (power, pipeline, buried cable),
Photography, Pollution detection/monitoring, Sightseeing
Helicopters: **1**-B212,**2**-206L,**1**-S61N,**2**-S76A,
1-205A

WOR Radio
1440 Broadway
New York, NY 10018
☎212-764-7000
Chief Pilot: George J. Meade
Operations: Traffic surveillance
Helicopters: **1**-206B

***WRNJ Radio - Radio New Jersey**
Box 1000
Hackettstown, NJ 07840
☎201-850-1000
President/General Manager: Larry Tighe, Jr.
Comptroller: G. Beckenthal
Operations: Corporate (US part 91, not for hire),
Traffic surveillance
Helicopters: **1**-206B

WSVN-TV Channel 7
1401 79th Street Causeway
Miami, FL 33141
☎305-751-6692
Chief Executive Officer: Robert Leider
Chief Pilot/Reporter: Maurice Johnson
V.P. Public Relations: George Mills
Operations: Corporate (US part 91, not for hire),
Electronic news gathering, Traffic surveillance
Helicopters: **1**-206B

WXIA-TV Atlanta
Atlanta, GA

Wackenhut Services, Inc.
Aiken, SC

Waggoner Aircraft Inc.
Bethany, OK

Walkers Helicopter Service Inc.
Baileyton, AL

Wall Street Helicopters, Inc.
New York, NY

Wanganui Aero Work, Ltd.
Wanganui, New Zealand

Ward Helicopters, Inc.
Vivian, LA

Warner Lambert Company
Flight Operations
Morristown Municipal Airport
Morris Plains, NJ 07960
☎201-540-4901
Operations Manager: Philip G. Geib
Chief Pilot: Roger B. Loomis
Operations: Corporate (US part 91, not for hire)
Helicopters: **2**-S76A

Warren County Sheriff
Vicksburg, MS

Warren Police Department
Detroit, MI

Washington Metro Police Department
Washington, DC

Wayfarer Ketch Corporation
Hangar G
Westchester County Airport
White Plains, NY 10604
☎914-949-4424
Vice President: Malcolm R. Doak
Operations Manager: James A. Palmer
Chief Pilot, Rotary Wing: Ralph T. Williams
Director of Maintenance: Edward C. Abbott
Operations: Corporate (US part 91, not for hire)
Helicopters: **2**-B105,**1**-S76A

Wells Helicopter Service
Greenville, MI

West Coast Flying Services Inc
Blythe, CA

West Florida Helicopters Inc.
Saint Petersburg, FL

West Texas Helicopters, Inc.
Mertzon, TX

West Wind Helicopters, Inc.
Yakima, WA

Westcor Aviation Inc.
Phoenix, AZ

Western Helicopter Services Inc.
Newberg, OR

Western Helicopters Ltd.
Buffalo Sparrows, SK, Canada

Western Helicopters, Inc.
P.O. Box 579
Rialto, CA 92376
☎714-829-1051 ☐676421
President: Clair T. Merryweather
Director of Operations: Dorcey A. Wingo
Marketing: Rich Hargis
Chief Pilot: Peter H. Gillies
Operations: Air taxi/charter (US part 135),
Construction, Executive transport,
Exploration, External cargo, Fire control/support,
Patrol (power, pipeline, buried cable),
Photography, Pilot training school,
Repair station (FAA certified)
Helicopters: **1**-206B,**1**-500D,**1**-300B,
1-500C,**1**-300C,**1**-206L

Western Helicopters, Inc.
Montrose, CO

Western Piping & Engineering Inc.
San Francisco, CA

Westernair Inc.
Albuquerque, NM

Westfall Helicopter Corp.
Beverly, MA

Westwing A/S
Paradis, Norway

Weyerhaeuser Company
Corporate Aircraft
Tacoma, WA 98477
☎206-241-2858 ☐910-441-2615
Manager, Corporate Aircraft: W.K. Smith
Chief Helicopter Pilot: Dale H. Erdelbrock
Chief Pilot, Mid South: G.M. MacNamara
Chief Inspector: Arden Davis
Operations: Air taxi/charter (US part 135),
Fire control/support, Forestry, general
Helicopters: **3**-B212,**7**-206B

---

* Indicates that complete membership application has been received and is now being processed in accordance with official HAI Bylaws.

Whirl-Wide Helicopters, Ltd.
Dunedin, New Zealand

Whirling Dervish
Los Altos, CA

***Whirlybird, Inc.**
6310 Frankford Avenue
Baltimore, MD 21206
☎301-483-9227
President: Thomas Obrecht
Chief Pilot/Director of Operations:
Jesse G. Hadaway, Jr.
Operations: Air taxi/charter (US part 135),
Electronic news gathering, Executive transport,
Photography Pilot training school, Sightseeing
Helicopters: **1**-206L

Whirly Birds, Inc.
Lake Wales, FL

Whirlybird Helicopter, Inc.
Memphis, TN

Whirlybirds
Warwickshire, England

Frank L. Whitcomb
d/b/a Drewsville Airways
Box 37
Drewsville, NH 03604
☎603-445-5555
Owner: Frank L. Whitcomb
Operations: Corporate (US part 91, not for hire),
Private owners
Helicopters: **1**-206B

White Mountain Airways
P.O. Box 679
North Conway, NH 03860
☎603-356-2930
President: Wylie L. Apte
Operations: Air taxi/charter (US part 135),
Executive transport, Forestry, general,
Government contracting,
Law enforcement (not for hire), Photography,
Private owners, Sightseeing, Skiing, Traffic surveillance
Helicopters: **2**-206B

White Ophthalmology Clinic
Greenville, NC

White Saddle Air Services Ltd.
Tatla Lake, BC, Canada

Whiteshell Air Services
Manitoba, BC, Canada

Whonnock Industries Ltd.
Vancouver, BC, Canada

Wideroe's Flyvesekskap A/S
Oslo, Norway

E.W. Wiggins Airways, Inc.
Norwood, MA

Wilbur's Incorporated
Merrill Field
1740 E. 5th Avenue
Anchorage, AK 99501
☎907-272-6361
President: Joseph Wilbur
Operations: Air taxi/charter (US part 135),
External cargo, Photography,
Pilot training school, Sightseeing
Helicopters: **3**-B47G

Wilco Aviation
Ozark, AL

Wildhorse Helicopters
Pendleton, OR

Wildlife Helicopter Services (Pty.) Ltd.
Honeydew, South Africa

Wilkinson Flying Service Inc.
Lexington, KY

Will Squyres Helicopter Services
Lihue, Kauai, HI

Williams Aircraft Co.
Niagara Falls, NY

Williams Aviation Co.
Midland, TX

Williams Flying Service Inc.
Seagraves, TX

Williams Helicopters, Inc.
Tutwiler, MS

Willmar Aerial Spraying Inc.
Olivia, MN

Wilsey, Bennett Company
P.O. Box 3532
San Francisco, CA 94119
☎415-391-4150
President: H.W. Poett
Operations Manager: M.W. Wilsey
Chief Pilot: Clifford D. Mooney
Operations: Corporate (US part 91, not for hire),
Executive transport
Helicopters: **1**-369D

Keith Wilson Helicopters, Inc.
Memphis, TN

Steve Wilson, Inc.
Athon, IA

Windward Aviation Inc.
Enid, OK

Wishart Helicopters (1978) Ltd
Hamilton, New Zealand

Marc Wolff - The Helicopter Partnership
London, England

Woodland Helicopters Limited
Delta, BC, Canada

Worldwide Helicopter
Cayman Islands

Wright Airlift International Inc.
3501 Lakewood Boulevard
Long Beach, CA 90808
☎213-420-3301
President: Clayton D. Wright
Chief Pilot: Bill McMillan
Director, Maintenance: Ray Hanna
Operations: Air taxi/charter (US part 135),
Construction, Electronic news gathering,
EMS/air ambulance, Executive transport,
Exploration, External cargo, Fire control/support,
Forestry, general, Government contracting,
Law enforcement (for hire), Offshore,
Patrol (power, pipeline, buried cable),
Photography, Pollution detection/monitoring,
Repair station (FAA certified), Sightseeing,
Skiing, Traffic surveillance
Helicopters: **2**-214B,**1**-B212,**2**-206B,
1-341G,**1**-S62A

Wright Brothers Aviation, Ltd.
New Westminster,BC, Canada

The Wright Company, Inc.
Federal Way, WA

***Yellowhead Helicopters Ltd.**
P.O. Box 18
Valemont, BC, V0E 2Z0, Canada
☎604-566-4401
President: Garry Forman
Operations: Air taxi/charter (US part 135),
EMS/air ambulance, Exploration, External cargo,
Fire control/support, Forestry, general,
Government contracting, Herding (stock & wildlife),
Photography, Sightseeing
Helicopters: **3**-206B

Young Aviation Services
P.O. Box 4403
Springfield, IL 62607
☎217-793-1919
Operations Manager: Steven M. Young
Operations: Agriculture, Air taxi/charter (US part 135),
Executive transport, Government contracting,
Herding (stock & wildlife), Sightseeing,
Patrol (power, pipeline, buried cable), Photography
Helicopters: **1**-300C

Yukon Airways, Ltd.
Whitehorse, YT, Canada

Yuma Helicopters, Inc.
4433 S. 4th Avenue Ext.
Yuma, AZ 85364
☎602-783-4300
President: Eugene Dewey
Operations: Agriculture
Helicopters: **5**-47G5

H.B. Zachry Company
10226 John Cape Road
San Antonio, TX 78216
☎512-828-1868 ☐767426
Chief Pilot: Byron M. Reed
Operations: Corporate (US part 91, not for hire),
Construction
Helicopters: **1**-206L

Zimmer Air Services
Charing Cross, ON, Canada

MEMBER

Be a leading exponent of the helicopter industry

...by becoming a member of HAI.

Even a modest increase in membership means an exponential increase in our ground effect.

The HAI enjoys a worldwide reputation as the focal point and principal forum of the civil helicopter industry.

And the direct benefits HAI offers its members provide an immediate return on the investment. Services and benefits run the gamut—from The Helicopter Annual to management and safety seminars designed specially for helicopter operators.

There are three membership categories: helicopter operators, associate members (suppliers to the industry) and sustaining members (individuals who wish to support the growth of the helicopter industry).

Joining will give you an excellent benefit package now, and will increase the magnitude of HAI's efforts on behalf of the entire industry.

For a free information package on HAI membership, return the postpaid card on page 80, or call the
Helicopter Association International,
1619 Duke Street
Alexandria, VA 22314-3406
Telephone: 703-683-4646
Telex: 89-615

Helicopter
Association
International

Geographic matrix of U.S. member operators by operation

	Agriculture	Air carrier/part 127	Air taxi/charter/part 135	Bank paper transportation	Commuter air carrier/sched.	Construction	Corporate/part 91, not for hire	Electronic news gathering	EMS/air ambulance	Executive transport	Exploration	External cargo	Fire control/support	Forestry, general	Government contracting	Government agency/not for hire	Herding/stock & wildlife	Law enforcement/for hire	Law enforcement/not for hire	Logging	Mechanic training school	Offshore	Patrol/power, pipe, buried cable	Photography	Pilot training school	Pollution detect/monitor	Private owners	Repair station/FAA certified	Sightseeing	Skiing	Traffic watch
Alaska																															
Alaska Helicopters, Inc. Anchorage			●			●					●	●	●		●					●		●	●					●			
ERA Helicopters, Inc. Anchorage		●	●		●	●				●	●	●	●									●						●			
International Air Transport, Inc. Anchorage	●		●								●	●	●	●	●		●					●	●					●		●	
Seairmotive Inc. Anchorage			●			●					●	●	●	●	●							●	●	●				●	●		
Trans-Alaska Helicopters, Inc. Anchorage			●			●					●	●	●	●	●								●					●	●		
Wilbur's Incorporated Anchorage			●									●												●	●				●		
Tundra Copters Fairbanks			●			●					●				●																
Kenai Air Alaska, Inc. Kenai			●						●	●	●	●	●		●		●					●						●			
Helipad Aviation, Inc. Ketchikan			●											●	●			●				●									
Temsco Helicopters, Inc. Ketchikan			●			●	●		●	●	●	●	●	●	●					●		●	●					●	●		
Aurora Helicopters, Inc. Willow	●		●								●	●			●			●					●						●		
Arizona																															
Grand Canyon Helicopters Grand Canyon			●		●											●								●				●	●	●	
Arizona Dept. of Public Safety Phoenix									●										●												
Arizona Public Service Co. Phoenix							●			●		●											●								
KPNX Television, Inc. Phoenix								●																							●
Knoell Bros. Construction Inc. Phoenix			●				●			●																					
Salt River Project Phoenix							●			●		●											●								
Air Services International, Inc. Scottsdale			●	●		●		●	●	●	●	●	●	●	●		●						●	●				●	●		
Tucson Police Department Tucson																●															
Yuma Helicopters, Inc. Yuma	●																														
Arkansas																															
Central Flying Service, Inc. Little Rock			●					●		●													●	●				●			
California																															
Northrop Corporation Anaheim															●	●															
C.R.I. Apple Valley	●		●			●			●		●	●	●	●	●		●					●	●	●	●					●	
K.W. Emerson Inc. Arnold							●																								
Corwin D. Denney Beverly Hills																											●				
EJ Helicopters, Inc. Burbank			●					●																							
County of Ventura Camarillo									●				●			●		●													
Monterey Peninsula Helicopters Carmel Valley			●												●		●	●					●	●					●		

	Agriculture	Air carrier/part 127	Air taxi/charter/part 135	Bank paper transportation	Commuter air carrier/sched.	Construction	Corporate/part 91, not for hire	Electronic news gathering	EMS/air ambulance	Executive transport	Exploration	External cargo	Fire control/support	Forestry, general	Government contracting	Government agency/not for hire	Herding/stock & wildlife	Law enforcement/for hire	Law enforcement/not for hire	Logging	Mechanic training school	Offshore	Patrol/power, pipe, buried cable	Photography	Pilot training school	Pollution detect/monitor	Private owners	Repair station/FAA certified	Sightseeing	Skiing	Traffic watch
Southern California Edison Co. Chino						●	●			●	●	●										●	●	●		●					
Rogers Helicopters, Inc. Clovis	●		●	●		●		●	●	●	●	●	●	●	●		●					●	●	●				●	●	●	
Crane Helicopter Services Inc. Fremont			●			●					●	●	●	●	●								●	●							
Infinity Aviation, Inc. Lincoln							●																					●			
Arctic Air Service, Inc. Lompoc						●			●		●	●			●							●									
Associated Helicopter Services Long Beach			●			●				●	●	●	●		●							●	●	●					●	●	
Island Express, Inc. Long Beach			●							●														●					●		
Wright Airlift International Long Beach			●			●		●	●	●	●	●	●	●	●			●				●	●	●		●		●	●	●	●
California Federal Savings & Loan Los Angeles							●																								
Helitac Aviation, Inc. Los Angeles			●	●				●		●														●							
Security Pacific National Bank Los Angeles							●																								
Commodore Helicopters Mill Valley		●	●					●		●													●	●					●		●
NASA Ames Research Center Moffett Field																●															
Helicopters Unlimited, Inc. Oakland			●	●					●	●												●									
Fluor Flight Operations Ontario							●																								
Aspen Helicopters Inc. Oxnard			●			●	●	●		●	●	●	●	●	●		●	●				●	●	●	●	●		●			
County of Los Angeles Fire Department Pacoima													●			●															
Pasadena Police Department Pasadena																●			●					●							
Brian Chuchua's Jeep, Inc. Placentia							●																	●							
Louisiana-Pacific Corp. Red Bluff							●			●				●																	
Redding Air Service Inc. Redding			●										●	●	●		●						●					●			
Western Helicopters, Inc. Rialto			●			●				●	●	●	●										●	●	●			●			
Warner W. Hodgdon Riverside							●																								
California Department of Forestry Sacramento													●	●		●															
KCRA TV - Kelly Broadcasting Sacramento							●	●																●							
Verticare Salinas	●	●	●			●					●	●	●	●			●						●	●					●	●	
ParkCentre Properties San Bernadino							●																								
Wilsey, Bennett Company San Francisco							●			●																					
Almaden Vineyards Inc. San Jose							●																								
Aris Helicopters, Ltd. San Jose			●			●				●	●	●	●										●	●	●			●			
The Dolezal Company San Luis Obispo			●			●		●		●		●	●	●	●			●				●	●	●					●	●	●
TRIAD America International Santa Barbara										●																					

	Agriculture	Air carrier/part 127	Air taxi/charter/part 135	Bank paper transportation	Commuter air carrier/sched.	Construction	Corporate/part 91, not for hire	Electronic news gathering	EMS/air ambulance	Executive transport	Exploration	External cargo	Fire control/support	Forestry, general	Government contracting	Government agency/not for hire	Herding/stock & wildlife	Law enforcement/for hire	Law enforcement/not for hire	Logging	Mechanic training school	Offshore	Patrol/power, pipe, buried cable	Photography	Pilot training school	Pollution detect/monitor	Private owners	Repair station/FAA certified	Sightseeing	Skiing	Traffic watch
Sonoma County Sheriff's Office Santa Rosa									●							●			●												
Big Valley Aviation Inc. Stockton																												●			
Alexair Torrance			●	●					●	●									●					●	●			●	●		●
Helipad Aviation, Inc. Ukiah			●			●	●	●	●	●	●	●	●	●	●		●	●				●	●	●					●	●	
Blakes Helicopter Service Vacaville						●					●	●		●			●						●	●			●		●		
Briles Wing & Helicopter, Inc. Van Nuys			●	●		●		●	●	●	●	●	●	●	●		●					●	●	●		●			●	●	●
City of Los Angeles Van Nuys						●				●		●				●							●	●							●
Jetcopters, Inc. Van Nuys			●	●		●				●		●												●	●			●	●		
Siller Bros., Inc. Yuba City						●					●	●		●	●					●											
Colorado																															
Mountain Bell Flight Operations Denver						●	●			●		●											●								
Pubiic Service Co. of Colorado Denver							●																●								
Air Methods, Inc. Englewood									●																						
Colorado Airlift Inc. Englewood			●			●						●																			
Ptarmigan Helicopters, Inc. Evergreen			●			●					●	●		●	●					●			●							●	
Geo-Seis Helicopters, Inc. Fort Collins			●			●			●		●	●	●	●	●		●	●		●		●	●	●		●				●	
Redstone Aero Services Grand Junction			●									●		●	●			●											●		
Ag Air Inc. Johnstown	●											●																			
Connecticut																															
United Technologies Corp. E. Hartford							●																								
Delta Helicopter Service, Inc. Glastonbury			●	●				●		●				●	●								●	●					●	●	●
Hartford Helicopters, Inc. Hartford			●				●			●																		●			
The Travelers Corporation Hartford								●																							
Nor Air, Inc. Sharon	●						●				●	●																			
Mobil Oil Corporation Stamford							●															●									
AEtna Life & Casualty Windsor Locks							●																								
CIGNA Corporation Windsor Locks							●			●																					
Delaware																															
E.I. Du Pont Nemours & Company Wilmington							●			●																					
District of Columbia																															
Gannett Co., Inc. Washington							●	●																●							●
Steuart Petroleum Co. Washington							●																								
U.S. Jet Aviation, Inc. Washington			●					●	●	●					●			●						●				●	●		

	Agriculture	Air carrier/part 127	Air taxi/charter/part 135	Bank paper transportation	Commuter air carrier/sched.	Construction	Corporate/part 91, not for hire	Electronic news gathering	EMS/air ambulance	Executive transport	Exploration	External cargo	Fire control/support	Forestry, general	Government contracting	Government agency/not for hire	Herding/stock & wildlife	Law enforcement/for hire	Law enforcement/not for hire	Logging	Mechanic training school	Offshore	Patrol/power, pipe, buried cable	Photography	Pilot training school	Pollution detect/monitor	Private owners	Repair station/FAA certified	Sightseeing	Skiing	Traffic watch
Florida																															
William K. Carpenter Boca Raton																											●				
Knight Aviation Services, Inc. Boca Raton		●	●				●	●		●	●			●										●					●		
Keystone Helicopter Services Fort Lauderdale											●				●													●			
Crescent Airways, Inc. Hollywood			●						●				●											●	●						
Helicopter Services of Jacksonville, Inc. Jacksonville			●					●		●					●								●	●				●	●		
Africair, Inc. Miami												●										●									
Florida Power & Light Company Miami							●																								
Tropical Helicopter Airways Inc. Miami			●	●	●			●		●		●			●				●				●	●	●			●	●		●
WSVN-TV Channel 7 Miami							●	●																							●
Orlando Helicopter Airways Inc. Orlando	●					●						●																●			
Atlantic Helicopter Service Palm Beach							●																	●							
Orlando Blade Technologies, Inc. Sanford																															
Rotor Parts Inc. Sanford																												●			
Aircoastal Helicopters Inc. West Palm Beach			●						●	●														●					●		
Georgia																															
Mid-State/Executive Helicopters, Inc. Atlanta			●		●	●		●		●	●	●	●	●	●			●					●	●	●			●	●		●
Dooley Helicopters, Inc. Chamblee			●					●		●														●				●			●
Hawaii																															
Royal Helicopters, Inc. Honolulu			●			●		●	●	●		●	●		●								●	●					●		
Maui Helicopters Inc. Kihei			●									●			●			●						●					●		
South Sea Helicopters, Inc. Lihue			●							●		●		●	●									●					●		
Idaho																															
Crew Concepts, Inc. Boise			●			●				●	●	●	●	●				●					●							●	
Idaho Helicopters, Inc. Boise	●		●			●			●		●	●	●	●	●		●						●	●					●		
American Protective Services, Inc. Idaho Falls																●			●												
Bird Space Technology Sandpoint									●																						
Reeder Flying Service, Inc. Twin Falls			●			●				●	●	●	●		●								●	●					●	●	

	Agriculture	Air carrier/part 127	Air taxi/charter/part 135	Bank paper transportation	Commuter air carrier/sched.	Construction	Corporate/part 91, not for hire	Electronic news gathering	EMS/air ambulance	Executive transport	Exploration	External cargo	Fire control/support	Forestry, general	Government contracting	Government agency/not for hire	Herding/stock & wildlife	Law enforcement/for hire	Law enforcement/not for hire	Logging	Mechanic training school	Offshore	Patrol/power, pipe, buried cable	Photography	Pilot training school	Pollution detect/monitor	Private owners	Repair station/FAA certified	Sightseeing	Skiing	Traffic watch
Illinois																															
Chicago Fire Department Chicago									●				●			●			●												●
Continental Illinois National Bank N.A. Chicago				●			●			●																					
Executive Helicopter, Inc. Chicago			●	●				●		●		●			●								●	●				●	●		●
Sears Roebuck and Company Chicago							●																								
Standard Oil Co. of Indiana Chicago							●																								
Midwest Helicopter Airways, Inc. Hinsdale			●	●		●			●	●	●	●		●	●					●											
Illinois State Toll Highway Oakbrook																●			●					●							●
Illinois Department of Transportation Springfield							●		●	●						●			●												
Young Aviation Services Springfield	●		●							●					●		●						●	●					●		
Perkinson Copters, Inc. Warrensburg	●		●					●					●		●		●	●					●		●			●			
Indiana																															
Black Beauty Coal Company, Inc. Evansville							●																								
Public Service Co. of Indiana Plainfield						●	●			●				●									●	●							
Kentucky																															
Diamond Shamrock Aviation Co. Lexington							●																								
Shamrock Coal Company Manchester							●																								
Louisiana																															
Heli-Air Inc. Broussard			●						●	●	●	●										●							●		
Energy Helicopters, Inc. Houma			●			●	●			●	●	●										●	●	●				●			
Air Logistics Lafayette		●	●						●	●	●	●									●	●	●		●			●			
Industrial Helicopters, Inc. Lafayette	●		●			●				●	●	●			●		●					●	●	●				●	●		
Petroleum Helicopters, Inc. Lafayette			●			●			●	●	●	●			●							●	●	●				●			
Mobil Oil Exploration & Producing Southeast, Inc. Morgan City							●			●												●									
Chevron U.S.A. Inc. New Orleans							●															●									
Shell Offshore, Inc. New Orleans																						●									
SuWest Airways, Inc. New Orleans			●			●	●	●		●				●	●			●				●	●	●		●	●	●	●		
Maine																															
Northeast Helicopter Service Bucksport	●		●									●		●									●								
Maryland																															
Baltimore Gas & Electric Co. Baltimore							●			●													●	●							
Omniflight Airways, Inc. Baltimore			●					●	●					●											●						
Whirlybird, Inc. Baltimore			●					●		●														●	●				●		
D.O.C. Incorporated Bethesda										●																					

	Agriculture	Air carrier/part 127	Air taxi/charter/part 135	Bank paper transportation	Commuter air carrier/sched.	Construction	Corporate/part 91, not for hire	Electronic news gathering	EMS/air ambulance	Executive transport	Exploration	External cargo	Fire control/support	Forestry, general	Government contracting	Government agency/not for hire	Herding/stock & wildlife	Law enforcement/for hire	Law enforcement/not for hire	Logging	Mechanic training school	Offshore	Patrol/power, pipe, buried cable	Photography	Pilot training school	Pollution detect/monitor	Private owners	Repair station/FAA certified	Sightseeing	Skiing	Traffic watch
Massachusetts																															
Digital Equipment Corporation Bedford							●			●																					
Simplex Time Recorder Co. Gardener							●																								
Data General Corporation Westboro							●																								
Michigan																															
McMahon Helicopter Services Canton			●					●		●													●	●		●					
Allied Automotive Detroit							●																								
Amway Corporation Grand Rapids							●																								
B & G Helicopter Corp. Grand Rapids			●			●				●		●											●	●				●	●		●
Consumers Power Company Jackson							●			●				●									●								
Metro Copters Incorporated Whitmore Lake							●	●																●			●				●
Missouri																															
Anheuser-Busch Companies, Inc. Bridgeton							●																								
St. Louis Helicopter Airways, Inc. Chesterfield			●			●		●	●	●		●			●									●		●					●
Dick Hill Helicopters Springfield																	●														
Fostaire Helicopters St. Louis			●					●	●	●		●			●								●	●					●		●
Montana																															
Mountain West Helicopters Kalispell			●						●		●	●	●	●	●									●				●	●		
Nebraska																															
Duncan Aviation, Inc. Lincoln			●						●	●															●			●			
Nevada																															
El Aero Services, Inc. E. Ely			●								●				●		●											●			
El Aero Services, Inc. Elko			●							●	●	●	●	●	●		●	●					●					●	●	●	
Collins Brothers Corporation Terrible Herbst Inc. Las Vegas							●																								
Heavenly Valley Helicopters, Inc. Stateline			●			●	●		●	●	●	●		●			●							●					●	●	
New Hampshire																															
Aero Support, Inc. Bedford			●	●		●				●													●	●	●				●	●	
Joe Brigham, Inc. Bow			●			●				●		●		●	●								●	●							
Frank L. Whitcomb Drewsville							●																				●				
New Hampshire Helicopters, Inc. Hampton			●							●														●				●	●		
Business Helicopters Inc. Manchester			●				●	●		●														●			●		●		●
White Mountain Airways North Conway			●							●				●	●				●					●			●		●	●	●

	Agriculture	Air carrier/part 127	Air taxi/charter/part 135	Bank paper transportation	Commuter air carrier/sched.	Construction	Corporate/part 91, not for hire	Electronic news gathering	EMS/air ambulance	Executive transport	Exploration	External cargo	Fire control/support	Forestry, general	Government contracting	Government agency/not for hire	Herding/stock & wildlife	Law enforcement/for hire	Law enforcement/not for hire	Logging	Mechanic training school	Offshore	Patrol/power, pipe, buried cable	Photography	Pilot training school	Pollution detect/monitor	Private owners	Repair station/FAA certified	Sightseeing	Skiing	Traffic watch
New Jersey																															
Express Marine, Inc. Camden							●			●												●									
WRNJ Radio - Radio New Jersey Hackettstown							●																								●
Metropolitan Helicopter Service Inc. Holmdel			●				●			●														●							
Omniflight Helicopter Services Linden					●					●																					
Warner Lambert Company Morris Plains							●																								
A.T. & T. Morristown							●																								
Allied Corporation Morristown							●			●																					
New Jersey Bell Telephone Co. Newark							●																								
Analar Corp./Church & Dwight Princeton			●	●			●			●													●	●					●		●
Schiavone Construction Co. Secaucus			●																												
Colgate-Palmolive Company Teterboro							●																								
Executive Air Fleet Teterboro		●	●				●			●																					
Port Authority of New York & New Jersey Teterboro																●															
Caesars Atlantic City Trenton							●																								
RCA Corporation Trenton							●			●																					
Pfizer, Inc. W. Trenton							●																								
Damin Aviation Corporation Weehawken			●	●			●	●		●								●					●	●				●			●
Resorts International Airline Weehawken		●	●		●		●			●																			●		
Dow Jones & Co. West Trenton							●																								
New Mexico																															
Pay-Jay Air, Inc. Artesia			●				●			●							●						●	●			●		●		
New York																															
New York State Police Albany									●							●		●													
State of New York Aviation Albany									●	●		●	●	●		●										●					
Aviation Services Unlimited Barneveld			●	●		●				●	●		●	●	●			●					●	●		●			●	●	●
Inland Aero Service, Inc. Batavia	●																														
GTS International, Ltd. Buffalo										●																					
International Union of Operating Engineers Farmingdale						●	●		●													●									
Golden Nugget Transportation Corp. Garden City							●																								
Island Helicopter Corporation Garden City	●		●	●	●			●	●	●														●	●			●	●		
Balboa Pacific Helicopters Great Neck										●												●					●				
Envirogas, Inc Hamburg							●																								
Pan American World Airways New York		●	●																												
WOR Radio New York																															●
Heussler Air Service Corp. Niagara Falls			●					●	●	●								●					●	●	●	●		●	●		●

	Agriculture	Air carrier/part 127	Air taxi/charter/part 135	Bank paper transportation	Commuter air carrier/sched.	Construction	Corporate/part 91, not for hire	Electronic news gathering	EMS/air ambulance	Executive transport	Exploration	External cargo	Fire control/support	Forestry, general	Government contracting	Government agency/not for hire	Herding/stock & wildlife	Law enforcement/for hire	Law enforcement/not for hire	Logging	Mechanic training school	Offshore	Patrol/power, pipe, buried cable	Photography	Pilot training school	Pollution detect/monitor	Private owners	Repair station/FAA certified	Sightseeing	Skiing	Traffic watch
Villa Banfi Old Brookville							●																								
Thomson Industries, Inc. Port Washington			●				●			●																					
General Transportation Corp. Ronkonkoma							●																								
Fugazy Air, Inc. Spring Valley			●							●					●								●	●					●		
Reavcom Services Inc. Spring Valley			●				●			●														●							
I.B.M. Corp. Wappingers Falls							●			●																					
Onondaga County Sheriff's Department Warners																			●												
Kirby N.Y. Realty Company Westhampton Beach																											●				
American Express Company White Plains							●																								
C.B.S. Inc. White Plains										●																					
Joseph E. Seagram & Sons, Inc. White Plains							●																								
View Top Corporation White Plains							●																								
Wayfarer Ketch Corporation White Plains							●																								
North Carolina																															
Triad Helicopters, Inc. Winston-Salem			●					●		●	●													●	●				●		●
North Dakota																															
Executive Air Taxi Corp. Bismarck	●		●					●	●	●					●		●						●	●				●			
Minnkota Power Co-op, Inc. Grand Forks							●																								
University of North Dakota Center for Aerospace Studies Grand Forks							●			●						●									●						
Ohio																															
New Horizons Aviation Inc. Cincinnati			●					●		●													●	●				●			●
CSX Beckett Aviation, Inc. Cleveland			●				●																								
Helicopter Minit-Men, Inc. Columbus	●											●											●	●				●			
Red Roof Inns Columbus							●																								
Dana Corporation Swanton							●																								
Oregon																															
Erickson Air Crane Co. Central Point												●		●	●					●								●			
Bertea/Aviation Inc. Corvallis	●		●			●		●			●	●	●	●	●		●			●			●	●	●	●		●	●		●
Bohemia Inc. Eugene			●						●	●		●	●	●										●							
Heli-Jet Corporation Eugene			●			●					●	●	●	●	●													●			
Aircraft at Your Call Hillsboro			●				●		●	●	●	●		●	●							●	●	●			●	●	●		
Hillsboro Helicopters Inc. Hillsboro			●					●				●		●	●									●	●				●		●
United Telephone Company of the Northwest Hood River							●																								
Mid Valley Helicopters, Inc. Jefferson	●		●	●				●		●	●	●	●	●	●		●						●			●			●		●
Rambling Rotors, Inc. La Grande	●		●			●			●			●	●	●	●			●					●	●				●	●	●	

	Agriculture	Air carrier/part 127	Air taxi/charter/part 135	Bank paper transportation	Commuter air carrier/sched.	Construction	Corporate/part 91, not for hire	Electronic news gathering	EMS/air ambulance	Executive transport	Exploration	External cargo	Fire control/support	Forestry, general	Government contracting	Government agency/not for hire	Herding/stock & wildlife	Law enforcement/for hire	Law enforcement/not for hire	Logging	Mechanic training school	Offshore	Patrol/power, pipe, buried cable	Photography	Pilot training school	Pollution detect/monitor	Private owners	Repair station/FAA certified	Sightseeing	Skiing	Traffic watch
Oregon (continued)																															
Evergreen Helicopters Inc. McMinnville	●		●	●					●		●	●	●	●	●					●		●	●	●				●			
Columbia Helicopters, Inc. Portland			●			●					●	●	●		●					●		●	●					●			
O'Brien International Ltd. Portland			●			●	●		●	●	●	●	●		●		●	●		●	●	●	●	●		●	●		●		
PacifiCorp Trans, Inc. Portland							●			●													●								
Portland General Electric Co. Portland							●																●								
Reforestation Services, Inc. Salem	●		●									●		●	●		●						●					●			
Pennsylvania																															
Lehigh Valley Helicopter, Inc. Allentown										●														●							
Mack Trucks, Inc. Allentown							●																								
NEP Communications, Inc Avoca								●																							
Royale Helicopter Service, Inc. Burgettstown			●			●		●		●	●			●	●								●	●		●			●		
Rorer Group, Inc. Fort Washington							●																								
Mincorp, Inc. Friedens			●				●			●																					
Ag Rotors Inc. Gettysburg	●		●			●				●		●	●	●									●		●			●			
Horsham Valley Airways, Inc. Horsham			●	●					●	●								●					●	●	●			●	●		
P. J. Hydraulics, Inc. Myerstown							●																								
Rockwell International Corp. Pittsburgh							●																								
United States Steel Corp. Pittsburgh							●																								
Beechwoods Flying Service Inc. Reynoldsville			●						●	●				●	●								●	●				●	●		
Conoco, Inc. W. Mifflin							●			●																					
Keystone Helicopter Services West Chester			●	●			●	●	●	●					●							●	●					●			
Al Hamilton Contracting Co. Woodland							●																								
Rhode Island																															
East Coast Helicopters, Inc. Cumberland			●					●											●					●							
Textron, Inc. Warwick										●																	●				
South Carolina																															
Omniflight, Inc. Charleston	●		●		●			●	●	●				●								●	●		●						
South Carolina Aeronautics Commission Columbia																●			●												
South Carolina Pipeline Corp. Columbia							●			●													●								
Milliken and Company Greer							●																								
Tennessee																															
Edwards & Associates, Inc. Bristol			●							●					●									●				●	●		
U.T. LIFESTAR, Aeromedical Services Knoxville									●																						
Thompson & Green Machinery Co. Lavergne			●				●																								
Aero International Helicopters Nashville			●	●				●		●								●					●	●	●				●		●

	Agriculture	Air carrier/part 127	Air taxi/charter/part 135	Bank paper transportation	Commuter air carrier/sched.	Construction	Corporate/part 91, not for hire	Electronic news gathering	EMS/air ambulance	Executive transport	Exploration	External cargo	Fire control/support	Forestry, general	Government contracting	Government agency/not for hire	Herding/stock & wildlife	Law enforcement/for hire	Law enforcement/not for hire	Logging	Mechanic training school	Offshore	Patrol/power, pipe, buried cable	Photography	Pilot training school	Pollution detect/monitor	Private owners	Repair station/FAA certified	Sightseeing	Skiing	Traffic watch
Texas																															
Pumpkin Air, Inc. Addison			●					●	●	●	●	●			●							●	●					●			
Tiller Helicopter Service Inc. Alice	●		●	●											●		●	●					●	●				●			
Helitron Corporation Amarillo			●					●		●	●						●						●	●	●				●		
Austin Helicopter Service Inc. Austin			●	●				●		●													●	●					●		●
J & J Maintenance Inc. Austin															●												●				
Gene Branscome Investments Baytown						●	●			●							●							●							
Omniflight Offshore, Inc. Corpus Christi																						●									
Dallas Police Department Dallas																			●												
Executive Airlift Dallas			●							●													●	●	●				●		●
Lone Star Helicopters, Inc. Dallas			●		●	●		●	●	●	●	●			●								●	●				●	●		
Recon Air, Inc. Dallas			●								●												●	●		●					
Emory Aviation Denison							●																								
City of Fort Worth Fort Worth										●			●			●			●					●		●					●
Heli-Dyne Systems Inc. Fort Worth									●																●			●			
Allison/Walker Interests, Inc. Houston							●																								
Armadillo Airways Helicopters Houston			●		●					●														●				●	●		
Executive Air Link Houston			●																												
Exxon Company USA Houston							●				●											●									
Hermann Hospital-Life Flight Houston									●																						
Houston Pipe Line Company Houston							●																								
Houston Police Department Houston																			●												
Phoenix Air Corporation Houston			●					●		●												●	●	●					●		●
Shell Oil Company Houston							●																								
Tenneco, Inc. Houston							●															●	●								
Transco Energy Company Houston							●															●									
Ty-Tua Inc., Aviation Services Houston			●							●																					
Benz Sales Company Hurst						●																					●				
Midland Helicopters Inc. Midland							●																				●				
Gulf Coast Helicopters, Inc. Pearland		●	●	●		●		●		●	●				●		●					●	●	●	●				●		●
H.B. Zachry Company San Antonio						●	●																								
D. H. Braman, Jr. Company Victoria							●			●							●		●				●				●				
Tom O'Connor, Jr. Victoria												●					●						●	●			●				

	Agriculture	Air carrier/part 127	Air taxi/charter/part 135	Bank paper transportation	Commuter air carrier/sched.	Construction	Corporate/part 91, not for hire	Electronic news gathering	EMS/air ambulance	Executive transport	Exploration	External cargo	Fire control/support	Forestry, general	Government contracting	Government agency/not for hire	Herding/stock & wildlife	Law enforcement/for hire	Law enforcement/not for hire	Logging	Mechanic training school	Offshore	Patrol/power, pipe, buried cable	Photography	Pilot training school	Pollution detect/monitor	Private owners	Repair station/FAA certified	Sightseeing	Skiing	Traffic watch
Utah																															
Blackhawk Helicopters, Inc. Provo			●			●			●	●	●	●	●	●			●						●	●							
Continental Helicopters, Inc. Provo			●			●			●	●	●	●	●	●	●								●	●				●		●	
Helicopters West, Inc. Provo			●					●		●	●	●	●		●									●				●		●	
Rocky Mountain Helicopters, Inc. Provo	●		●			●		●	●	●	●	●	●	●	●		●	●		●			●	●	●			●		●	●
KSL Television Salt Lake City							●	●																●							●
Virginia																															
Summit Helicopters, Inc. Cloverdale	●		●			●				●			●	●	●								●	●							
City of Virginia Beach Virginia Beach																●			●					●							
Washington																															
Cascade Helicopters, Inc. Cashmere	●		●			●			●	●	●	●	●	●	●		●							●				●	●	●	
HiLine Helicopters Inc. Darrington			●						●			●	●	●	●					●									●		
Eagle Air Helicopters, Inc. Forks			●			●					●	●	●	●	●					●				●							
Rockwell International Richland															●	●			●												
Aero-Copters Inc. Seattle			●						●	●	●	●	●	●	●								●	●				●	●	●	
American Helicopters Corp. Seattle			●	●		●		●	●	●	●	●			●							●		●		●			●	●	
Pacific Lumber & Shipping Co. Seattle			●			●		●		●	●	●		●									●	●					●		
Puget Sound Helicopters Inc. Seattle										●								●						●				●			●
Weyerhaeuser Company Tacoma			●										●	●																	
West Virginia																															
Mountain Jet Aviation, Inc. Elkins	●		●						●	●				●	●				●				●	●						●	
Wisconsin																															
Blackhawk Helicopter Services, Inc. Cottage Grove	●		●									●	●	●	●								●	●	●						
Omniflight Aircraft Corp. Janesville																															
Omniflight Helicopters, Inc. Janesville								●	●	●				●									●								
S.C. Johnson & Son, Inc. Racine							●																								
Wyoming																															
Hawkins & Powers Aviation Inc. Greybull	●		●						●	●	●	●	●	●	●		●	●					●	●		●		●	●		

Geographic matrix of International member operators by operation

	Agriculture	Air carrier/part 127	Air taxi/charter/part 135	Bank paper transportation	Commuter air carrier/sched.	Construction	Corporate/part 91, not for hire	Electronic news gathering	EMS/air ambulance	Executive transport	Exploration	External cargo	Fire control/support	Forestry, general	Government contracting	Government agency/not for hire	Herding/stock & wildlife	Law enforcement/for hire	Law enforcement/not for hire	Logging	Mechanic training school	Offshore	Patrol/power, pipe, buried cable	Photography	Pilot training school	Pollution detect/monitor	Private owners	Repair station/FAA certified	Sightseeing	Skiing	Traffic watch
Australia																															
Aero Support P/L Bankstown, NSW	●	●	●		●					●	●	●	●		●								●	●				●	●		
Rex Aviation Ltd. Bankstown, NSW										●											●				●			●			
Department of Aviation Canberra City, A.C.T.																●															
Jayrow Helicopters Pty. Ltd. Mentone, Victoria			●			●		●			●	●	●	●	●								●	●	●						
Bell Helicopter Australia Queensland																												●			
Rotaflite Queensland	●		●							●	●	●		●	●		●						●	●							
Commercial Aviation Pty. Ltd. Revesby, NSW											●	●										●									
Esso Australia Ltd. Sale, Victoria					●		●		●	●	●	●									●	●		●	●		●	●			
Dick Smith Adventure Pty. Ltd. Terrey Hills							●																				●				
Austria																															
Helikopter Air-Transport GmbH. Innsbruck			●			●			●	●		●	●	●						●			●	●					●	●	
Brazil																															
Lider Taxi Aereo S/A Belo Horizonte			●			●			●	●	●	●			●							●	●	●					●		
Cruzeiro Taxi Aereo S.A. Rio de Janeiro			●							●	●	●								●		●		●					●		
Helijet Aero Taxi Ltda. Rio de Janeiro												●										●									
Votec Servicios Aereos Rio de Janeiro	●		●		●	●						●										●	●	●					●		
Heliservice-Servicos Sao Paulo			●							●					●									●					●		
Pirelli S/A Sao Paulo							●			●																		●			
Selecta Aero Taxi Ltda. Sao Paulo			●	●				●		●		●	●	●	●			●					●	●		●		●	●		●
Canada																															
Dome Petroleum Ltd. Calgary, AB							●			●		●										●									
Mobil Oil Canada, Ltd. Calgary, AB							●				●											●									
Churchill Falls Labrador Corp. Churchill Falls, NF							●		●	●		●	●										●								
Nova, an Alberta Corporation Edmonton, AB							●																								
Fraser, Inc. Edmundston, NB							●			●				●																	
Horizon Helicopters, Inc. Kamloops, BC	●		●			●			●		●	●	●	●									●								
Terr-Air Rotary Lac la Biche, AB		●	●			●			●	●	●	●	●	●	●					●									●		
Ontario Hydro Mississauga, ON						●	●		●	●	●	●		●									●	●							
Hydro-Quebec Montreal, PQ			●				●			●					●	●															
Nova Lumber Co., Ltd. N. Vancouver, BC							●							●													●				
Okanagan Helicopters, Ltd. Richmond, BC			●			●			●		●	●	●	●		●				●	●	●	●	●	●			●	●	●	

	Agriculture	Air carrier/part 127	Air taxi/charter/part 135	Bank paper transportation	Commuter air carrier/sched.	Construction	Corporate/part 91, not for hire	Electronic news gathering	EMS/air ambulance	Executive transport	Exploration	External cargo	Fire control/support	Forestry, general	Government contracting	Government agency/not for hire	Herding/stock & wildlife	Law enforcement/for hire	Law enforcement/not for hire	Logging	Mechanic training school	Offshore	Patrol/power, pipe, buried cable	Photography	Pilot training school	Pollution detect/monitor	Private owners	Repair station/FAA certified	Sightseeing	Skiing	Traffic watch
Canada (continued)																															
Macmillan Bloedel Ltd. Richmond, BC							●																								
Maple Leaf Helicopters (Canada) Richmond, BC		●	●			●	●		●			●	●	●	●	●				●				●	●				●	●	
Vancouver Island Helicopters Sidney, BC						●			●	●	●	●	●	●									●	●	●			●			
Viking Helicopters, Ltd. St. Clet, PQ						●	●		●	●	●	●	●	●	●					●			●	●						●	
Sealand Helicopters Ltd. St. Johns, NF			●			●				●	●	●	●	●	●		●					●	●	●				●	●		
Kidd Creek Mines, Ltd. Timmins, ON							●			●	●	●																			
Yellowhead Helicopters, Ltd. Valemount, BC			●						●		●	●	●	●	●		●							●					●		
Finning Tractor & Equipment Vancouver, BC							●																								
Vernon Helicopters Ltd. Vernon, BC		●				●				●	●	●	●	●	●								●								
Custom Helicopters Ltd. Winnipeg, MB	●		●			●					●	●	●	●	●		●						●	●				●			
Chile																															
Heli-Chile Ltda. Santiago	●							●	●	●	●		●	●						●		●	●	●					●	●	
Helicopteros Andes S.A. Santiago	●		●			●					●	●	●	●								●	●	●					●	●	
Helimares Ltda. Santiago			●				●			●	●	●	●	●								●	●	●					●		
Servicio Aereo Litoral Ltda. Santiago	●		●						●			●		●								●	●						●	●	
Colombia																															
Aeroexpreso Bogota Ltda. Bogota			●						●	●	●	●			●								●		●						●
Helicopteros Nacionales de Colombia Bogota																							●	●				●	●		
Helivalle Ltda. Bogota	●	●	●	●						●	●	●			●							●		●							
Egypt																															
Petroleum Air Services Cairo					●																										
England																															
Dollar Air Services Limited Coventry	●		●			●			●	●	●	●	●	●	●					●			●	●	●	●		●	●		●
Shell Aircraft Limited London							●			●												●									
Air Hanson Ltd. Surrey			●	●						●		●			●			●						●	●			●			
Bristow Helicopter Group Ltd. Surrey	●		●		●	●				●	●	●			●						●	●	●	●	●			●			
Finland																															
Helikopteripalvelu Helsinki			●			●		●		●	●	●		●	●			●					●	●	●			●	●		
France																															
Heli Union Paris			●			●			●	●	●	●		●						●	●	●	●	●	●						
Greenland																															
Greenlandair, Inc. Godthaab			●	●	●	●			●	●	●	●			●		●				●	●	●	●		●			●		
Guatemala																															
Helicopteros de Guatemala Guatemala City	●		●						●	●	●	●			●								●	●	●			●			

	Agriculture	Air carrier/part 127	Air taxi/charter/part 135	Bank paper transportation	Commuter air carrier/sched.	Construction	Corporate/part 91, not for hire	Electronic news gathering	EMS/air ambulance	Executive transport	Exploration	External cargo	Fire control/support	Forestry, general	Government contracting	Government agency/not for hire	Herding/stock & wildlife	Law enforcement/for hire	Law enforcement/not for hire	Logging	Mechanic training school	Offshore	Patrol/power, pipe, buried cable	Photography	Pilot training school	Pollution detect/monitor	Private owners	Repair station/FAA certified	Sightseeing	Skiing	Traffic watch
Indonesia																															
ATA Asahi Transna Airways P.T. Jakarta			●							●	●			●						●		●		●							
Airfast Services P.T. Jakarta			●			●			●	●	●	●			●					●		●	●						●		
Derazona Air Service P.T. Jakarta			●																												
Indonesia Air Transport P.T. Jakarta			●			●			●	●	●	●		●	●							●	●								
National Utility Helicopters P.T. Jakarta			●			●			●	●	●	●		●	●					●		●	●	●					●		
Pelita Air Service P.T. Jakarta			●						●	●	●	●		●	●	●						●	●								
Ireland																															
Shannon Executive Aviation Ltd. County Clare		●	●	●	●		●			●													●	●	●			●			
Irish Helicopters, Ltd. Dublin		●	●			●				●		●										●	●	●			●		●		
Italy																															
Elitos Helicopters S.p.A. Florence			●			●				●	●	●	●	●							●	●	●		●	●					
Japan																															
Aero Asahi Corporation Tokyo	●	●	●		●	●				●		●	●	●	●					●		●	●	●			●	●	●	●	●
Kenya																															
Autair Helicopters (EA) Ltd. Nairobi	●					●			●	●	●	●			●		●						●	●							
Korea																															
Doosan Development Co., Ltd. Seoul	●	●			●				●	●	●	●		●	●							●	●	●		●			●		●
Malaysia																															
Penerbangan Sabah SDN BHD Kota Kinabalu, Sabah	●		●						●					●								●		●							
Kumpulan Guthrie Sendirian Kuala Lumpur	●									●																					
Malaysian Helicopter Services Kuala Lumpur																						●									
Mexico																															
Aeropycsa, S.A. de C.V. Mexico, D.F.			●							●														●							
Heliservicio Campeche Mexico, D.F.		●								●	●	●										●		●				●			
Department del Distrito Federal - Servicios Aereos Mexico, D.F.																●															
Netherlands																															
KLM Helikopters B.V. Schipol East						●			●	●		●			●							●		●		●		●	●		
New Zealand																															
Alpine Helicopters Queenstown	●		●			●					●	●		●			●							●					●	●	
Lakeland Helicopters, Ltd. Taupo	●	●	●			●			●	●		●	●	●	●		●						●	●					●	●	
Norway																															
Norwegian Air Ambulance Drobak			●						●	●		●						●						●					●		●
Helikopter Service A/S Lysaker			●						●		●	●								●	●	●	●	●	●			●	●		
Lufttransport A/S Tromsoe			●			●			●	●	●	●			●							●	●	●					●		
Puerto Rico																															
Travenol Laboratories, Inc. Carolina							●			●																					

	Agriculture	Air carrier/part 127	Air taxi/charter/part 135	Bank paper transportation	Commuter air carrier/sched.	Construction	Corporate/part 91, not for hire	Electronic news gathering	EMS/air ambulance	Executive transport	Exploration	External cargo	Fire control/support	Forestry, general	Government contracting	Government agency/not for hire	Herding/stock & wildlife	Law enforcement/for hire	Law enforcement/not for hire	Logging	Mechanic training school	Offshore	Patrol/power, pipe, buried cable	Photography	Pilot training school	Pollution detect/monitor	Private owners	Repair station/FAA certified	Sightseeing	Skiing	Traffic watch
Saudi Arabia																															
Arabian Helicopters Ltd. Dhahran			●							●		●										●	●	●		●		●			
Scotland																															
British Airways Helicopters Dyce, Aberdeen		●	●		●	●						●										●			●						
Singapore																															
Heli Services (PTE) Ltd. Singapore			●			●			●	●	●	●			●		●					●	●	●					●		
Mobil Producing Services Singapore											●											●									
South Africa																															
Court Helicopters (PTY) Ltd. Cape Town	●		●			●				●					●		●	●				●	●	●	●				●		●
Heliquip (PTY) Ltd. Transvaal	●	●	●							●	●	●					●			●			●	●	●	●					
Spain																															
AGRAR, S.A. Zaragoza	●	●	●			●			●	●		●		●										●	●			●	●		
Sweden																															
Sterner Aero AB Borlange	●		●			●			●			●	●	●						●	●		●	●	●				●	●	
Ostermans Aero AB Jarfalla			●		●	●						●			●							●		●	●			●	●		
Board of Civil Aviation Norrkoping																●															
Lapplandsflyg/Lapair AB Umea			●						●	●		●					●				●		●	●	●			●	●	●	
Switzerland																															
Heliswiss Belp	●					●			●	●	●	●	●	●	●			●		●	●	●	●	●	●			●	●	●	●
Swiss Air-Rescue (REGA) Zurich									●									●										●			
Thailand																															
Electricity Generating Authority Nonthaburi										●						●							●								
United Arab Emirates																															
Abu Dhabi Helicopters Limited Abu Dhabi			●						●	●		●										●	●	●		●					
West Germany																															
Motorflug GmbH Baden-Baden			●							●					●						●			●	●			●	●		
Wiking Helicopter Service GmbH Hamburg	●									●	●	●		●	●							●	●	●		●			●		

Directory of HAI associate members

An alphabetical listing of member firms serving the helicopter industry.

AO Reichert Scientific Instruments
122 Charlton Street
Southbridge, MA 01550
☎617-765-9744 ☐200257
Sales Manager: Paul Kearney
Services: Ground support equipment.

ARNAV Systems, Inc.
P.O. Box 23939
Portland, OR 97223
☎800-547-0254 ☐5106002185
Chairman & CEO: T.C. Achilles, Jr.
Vice President, Marketing: Dennis B. Nichols
Marketing Manager: Joe LaFayette
Services: Avionics manufacturer.

ASCO Flight Watch
3066 Mercer University Drive
Suite 100
Atlanta, GA 30340
☎404-452-7654
President: Ben Framer
Services: Computers for aviation.

79 **Atc® Flight Simulator Co.**
1650 19th Street
Santa Monica, CA 90404
☎213-453-3557 ☐284687
President: Barry Grant
Marketing Manager: Emmet Ryder
Services: Manufacturer of fixed and rotary flight simulators.

Abex Corporation
Aerospace Division
3151 W. Fifth Street
Oxnard, CA 93030
☎805-985-0217 ☐215612
President: G.E. DeVillers
Vice President, Marketing: B.L. Fuhrman
Director, Product Support: R.L. Bell
Manager General & Rotary Sales: Jack Kapich
Services: Manufacturers of hydraulic pumps, servo valves and integrated packages utilized on commercial and military helicopters.

Acadian Airmotive, Inc.
P.O. Box 10265
Station 1
Houma, LA 70363
☎504-868-1393 ☐9104902593
President: Michael Stevens
Senior Vice President: Glen Feigler
Vice President, Sales: Lawrence Garic
Vice President, Operations: Marc Stevens
Services: Wholesale aircraft parts.

Accessory Service Inc.
25139 Avenue Stanford
Valencia, CA 91355
☎805-257-2217 ☐662630
President: James L. Durbin
Vice President, Operations: Robert M. Clemens
Marketing Manager: Laura A. Burd
Sales Administrator: Katherine P. Rudolph
Services: Manufacture, overhaul and repair of hydraulic system components. HR Textron, Ronson & Abex authorized service center/dealer.

Aero Engineering Corporation
2000 Calumet Street
Clearwater, FL 33575
☎813-461-5758 ☐803882
Chief Executive Officer: Harry J. Barkett
President: Gene Sells
Vice President, Marketing: Michael Glass
Services: Manufacturer of helicopter air conditioning systems.

Aero Mechanism, Inc.
20327 Nordhoff Street
Chatsworth, CA 91311-6161
☎818-709-2851 ☐9104951710
President: S. Breckley
Sales Manager: Gary Noyes
Services: Manufacturer of quality flight instruments, cabin pressure instruments & pressure sensors for aircraft, ships & submarines.

Aero Quality Sales Co.
165 Chubb Avenue
Lyndhurst, NJ 07071
☎201-288-5510 ☐134325
Vice President/General Manager: Phil Caddoo
Director of Operations: John Downey
Marketing Services: Elizabeth Walker
Services: Authorized distributor for Marathon, SAFT, General Electric, Gill Aircraft Batteries, Christie, Hobart Ground Power Equip. & JET supplies.

Aero-Lift Consultants
3 Benton Street
Middleboro, MA 02346
☎617-946-0190
Proprietor: Marty Cole
Services: Marketing and pilot services.

Aero Support, Inc.
3215 E. Spring Street
Long Beach, CA 90806
☎213-595-1261 ☐656485
President: Frank S. Everts
Marketing/Sales: Rick Schorling
Chief Financial Officer/Secretary: Robert I. McCulley
Services: Aircraft and helicopter sales, helicopter components and spare parts, and repair and sales.

Aeronautical Accessories Inc.
P.O. Box 3689
Bristol, TN 37625
☎615-538-5151 ☐553446
President: James Wolfe
Vice President: David Kent
Vice President/Marketing: Rick Lewis
Services: Manufacture/sales helicopter accessories, replacement windows, interior trim, sales/distribution engine and airframe spares & components.

Aeronetics
2100 Touhy Avenue
Elk Grove Village, IL 60007
☎312-437-9300 ☐253594
Vice President/General Manager: W. Warren
Communications Manager: Ann T. Baldwin
Services: Design and manufacture of navigational flight instruments including RMIs.

32B **Aerospatiale Helicopter Corporation**
2701 Forum Drive
Grand Prairie, TX 75053-4005
☎214-641-0000 ☐730489
President: Robert N. (Bob) Mackinnon
Vice President, Marketing: Ron LaFleur
Director, Customer Support: John Niamtu
Services: Helicopter manufacturing, sales, repairs, support services for North America.

AeroTech Publications, Inc.
35 Throckmorton Lane
Old Bridge, NJ 08857
☎201-679-5151
President: Marvin M. Stern
V.P., Marketing/Sales: Susan Valentine
Services: Maintenance recordkeeping systems—adLog System is a complete aircraft maintenance recordkeeping system which organizes and centralizes all data for retrieval of all maintenance, airworthiness directive, service bulletin and inspection requirements. For use with IBM, IBM PC and XT.

Aerospatiale Helicopter Division
2-20 Avenue Marcel Cachin
La Courneuve, 93126, France
☎1-838-9178 ☐212836
Managing Director: Michel Thomas
Assistant Managing Director: J. Claude Rebuffel
Commercial Director: Lucien Lordereau
Charge de Missions: Jean Boulet
Product Support Director: Yves Birotteau
Services: Helicopter manufacturer.

Aggressive Aviation Insurance
P.O. Box 3857
Northridge, CA 91323
☎213-999-6014
Executive Vice President: Beverly Gassen
Services: Helicopter insurance.

C2 **Agusta Aviation Corporation**
Norcom & Red Lion Roads
Philadelphia, PA 19148
☎215-245-8860 ☐6851181
President: Enrico M. Striano
Vice President, Marketing: Frederick V. Martin, Jr.
Vice President, Operations: James Byrnes
Director of Corporate Communications: Marco Cicero
Services: Marketing, sales and support maintenance services for the Agusta Light Twin helicopter.

Air & Sea Inflatables, Inc.
214 Boudreaux Street
Building A
Lafayette, LA 70506
☎318-237-1110
President: Gerald W. South
Senior Vice President: Sheila R. South
Services: Repair & overhaul of helicopter fuel cells, floats, life rafts, life vest. PMA approved life vest covers and PMA approved float covers.

Air-Sure, Ltd.
2121 W. Spring Creek Parkway
Suite 102
Plano, TX 75023
☎214-596-9020 ☐881040
President: Bill Behan
Vice President: Brad Lowrey
Vice President: Todd Guelich
Services: Aviation insurance sales and service specializing in all rotor and fixed wing coverages. Special consulting services available.

Airborne Data Systems Ltd.
C-5455 Airport Road, South
Richmond, BC, V7B 1B5, Canada
☎604-276-2332
President: Murray Craig
Vice President, Marketing: Britt Whitaker
Communications Coordinator: Michelle Perrault
Services: Computerized aviation software.

Airclaims, Inc.
7315 Wisconsin Avenue, N.W.
Bethesda, MD 20814
☎301-652-4811 ☐898448
President: Robert E. Anson
Services: Aviation insurance claims specialists - offices in NY City, Washington, D.C., Miami, Dallas, Los Angeles, Anchorage, Central and South America.

Aircraft Gear Corporation
6633 W. 65th Street
Chicago, IL 60638
☎312-5[illegible]-2100 ☐270455
President: Ken M. Spurgeon
Executive Vice President: Kieth E. Sladek
Vice President, Marketing & Sales: George Baena
Vice President, Finance: Sal Barbaro
Services: Manufacturer of gears, gearboxes and rotor shafts for helicopters.

-AOG-

FOR A
FUEL CELL?

CALL
1-800-238-3835

- Remanufacture/Exchange/Overhaul/New
- World's Largest Inventory of Fixed Wing and Rotor Wing Aircraft Fuel Cells
- Helicopter Floats Overhauled
- 24 Hr./7 Day Week Service Worldwide
- 5 Yr. Limited Warranty

Our Worldwide Distributor
VAN DUSEN AIR

AFC

5680 SHELBY DRIVE•MEMPHIS, TN 38115
PHONE 901-362-2355
SALES NO. 1-800-238-3835
TLX 53835
MEMPHIS INTERNATIONAL AIRPORT

FAA Certified Repair Station #762-3

Aircraft Marketing, Ltd.
P.O. Box 27-3291
Boca Raton, FL 33427-329
☎305/368-7355 ☐150117
President: Louis J. Kaminsky
Services: Business aircraft & helicopter brokerage & sales.

Aircraft Modular Products
4000 N.W. 36th Avenue
Miami, FL 33142
☎305-633-6817 ☐522876
Vice President: Roger Koch
Sales Manager: Robin Heslop
Services: Aircraft and helicopter seats.

Aircraft Parts Corporation
160 Finn Court
Farmingdale, NY 11757
☎516-249-3053 ☐961341
President: S. Sherman
Marketing/Sales: Dick Siuniak
S. Friedner
Services: Manufacturer of starter generators, starters, voltage regulators.

Aircraft Porous Media, Inc.
Pall Corporation
2200 Northern Boulevard
East Hills, NY 11548-1289
☎516-484-5400 ☐968855
President/CEO: Henry Petronis
Vice President, Marketing: Cedric Sun
Vice President, Sales: Bob Fonte
Vice President, Sales: Saul Jupiter
Advertising Manager: Arnold Schwartz
Services: Engineered liquid and air filtration equipment for airborne applications.

Aircraft Technical Machine, Inc.
150 S. Camino Seco, Suite 106
Tucson, AZ 85710
☎602-296-9200 ☐165103
President/CEO: Ray Frazier
V.P., Marketing: George Kunke
Services: Overhaul of T53, 250 and PT6 accessories; repair and overhaul of Bell hydraulic servos.

Aircraft Technical Publishers
101 South Hill Drive
Brisbane, CA 94005
☎415-468-1705 ☐171048
President: William L. Daniels
Executive Vice President: Caroline D. Bonner
Vice President/Marketing: Cecil H. Carson, Jr.
Services: Microfiche, telecommunications, service information and record keeping. Helicopter maintenance manuals on microfiche.

Airfoil Division
of Vac-Hyd Corporation
1177 Great Southwest Parkway
Grand Prairie, TX 75050
☎214-641-6720 ☐794921
Vice President: Robert Guay
Technical Manager: Ken Speirs
Sales Manager: Earl Cole
Operations Manager: Art Kreger
Services: Airfoil is an authorized repair facility for Allison 250 turbine components.

(100) **Airwork Corporation**
Millville Municipal Airport
Millville, NJ 08332
☎609-825-6000 ☐831754
President: Frederick W. Becker
Marketing Manager: Terry Scott
Service Manager: Bob Holmes
Program Manager: Paul Nielsen
Services: Airwork Corporation is an authorized distributor of the Allison 250 engine, offering complete overhaul and repair support.

(96) **Alexander & Alexander, Inc.**
1185 Avenue of the Americas
New York, NY 10036
☎212-575-8000 ☐427306
Vice President: Thomas Redmond
Louis E. Nunez
Services: Insurance placement, risk analysis, risk management and self insurance services.

All-System Aerospace International, Inc.
29 Central Avenue
Hauppauge, NY 11788
☎516-582-9200 ☐640497
President: Karl G. Zacek
Services: Airframe spares for U.S. manufactured helicopters. Also, export sales.

(112) (113) **Allison Gas Turbine Division**
General Motors Corporation
2001 S. Tibbs Avenue
P.O. Box 420
Indianapolis, IN 46206-0420
☎317-242-5000 ☐6711029
General Manager: F.B. Wallace
Director, Small Aircraft Engine Programs:
R. Frederick Harvey
Director, Public Relations: D.G. O'Brien
Manager, Model 250 Product Support: C.E. Wagner
Services: Allision Gas Turbine Division manufactures small & large gas turbine engines used in rotary wing, fixed wing & industrial applications.

Alpha Aviation Insurance
Agency, Inc.
377 Route 17
Hasbrook Heights, NJ 07604
☎201-288-4831 ☐133545
President: Francis P. Brown
Larry Mattiello
Services: Aviation insurance.

Alyeska Pipeline Service Co.
1835 S. Bragaw Street
Anchorage, AK 99567
☎907-265-8534 ☐25127
President: G.M. Nelson
Supervisor/Aviation Services: Frank M. Heffernan
Services: Crude oil pipeline.

American ACMI
American Hospital Supply Corp.
300 Stillwater Avenue
Stamford, CT 06902
☎203-357-8300 ☐996466
Vice President, Industrial: William Babcock
Director, Industrial Engineering: Anthony Rega
Director, Sales/Marketing: Steven T. DeLisi
Project Engineer: Frank D'Amelio
Services: Manufacturers of borescopes.

American Society of Hospital
Based Emergency Air Medical Services
(ASHBEAMS)
28041 Lucero
Mission Viejo, CA 92692
☎714-581-9050
President: Daniel Reich
Executive Director: Nina Merrill
Services: ASHBEAMS is a non profit organization representing the emergency aero medical transport providors.

Ametek, U.S. Gauge Division
Aerospace Products
Station Square Two
Paoli, PA 19301
☎215-647-2121 ☐847445
Advertising Manager: William K. Mullan
Services: Manufacturer of engine & cockpit instruments, solid state pressure transducers and LCD displays.

Apeiron Technology, Inc.
P.O. Box 632
El Segundo, CA 90245
☎213-322-5536 ☐9103486274
President: Frederic L. Diamond
Sales: David Zapata
Vice President/Marine Division: P.J. Diamond
Administrative Manager: Lynda Nelson
Services: Overhaul, repair and sale of inflatable survival equipment.

Arabian American Oil Company
Aviation Department
Box 80
Dhahran, Saudi Arabia
☎62210 ☐601220
Manager, Aviation Department: M.W. Townsend
Manager of Operations: D.C. Hubener
Services: Oil exploration and production.

Arrow International
2611 S. Central Expressway
Dallas, TX 75215
☎214-421-7177
Vice President: Mark Kenner
Vice President, Marketing: Fred Kenner
V.P., Public Relations: Bernie Rosen
Sales: Don Simon
Services: Unique two phase program designed to remove carbon, oil, grease and corrosion leaving a slick, friction-free, tension breaker coating.

Associated Air Center
P.O. Box 20718
Dallas, TX 75220
☎214-350-4111 ☐732448
President: Lee Juan Lanford
Vice President/Marketing: Roy Gilbreath
Executive V.P./Public Relations: Jerry King
Vice President/Marketing: Robert W. Smith
Services: AAC is a complete helicopter overhaul and completion center, avionics, VIP interiors, paint and air conditioning, EMS.

Associated Aviation Underwriters
90 John Street
New York, NY 10038
☎212-766-1600 ☐125157
President: Robert M. Lowd
Executive Vice President: Daniel M. Izard
Senior Vice President: Harold F. Hirt
V.P., Safety & Engineering: Edward R. Williams
Services: Aviation hull and liability insurance, manufacturer's products liability coverages and risk management operations surveys.

Astronautics Corporation of America
P.O. Box 523
Milwaukee, WI 53201-0523
☎414-447-8200 ☐9102623153
Chief Executive Officer: Daniel M. Izard
President: Ronald E. Zelazo
Director of Marketing: Robert D. Seinfeld
Manager, Helicopter Programs: John E. Duffy
Services: Designs & manufactures flight & navigation instruments, CRT displays, symbol generators, autopilots, HUDs, air data & communication systems.

Atlantic Aviation Corporation
233 Industrial Avenue
Teterboro, NJ 07608
☎201-288-1740 ☐13-4529
President: William Patrick
Vice President/General Manager: Robert J. Greer
Vice President, Marketing: M. S. Graham
V.P., Public Relations: R. J. Ritchie
Manager, Aircraft Maintenance: John Budd
Services: Authorized service center for Aerospatiale, Bell, MBB, Allison, Lycoming. Total support capabilities: maintenance/spares/completions.

Atlantic Richfield Company
P.O. Box 7087
Dallas, TX 75209
☎214-651-5260
Manager/Chief Pilot Aviation: John A. Lyon
Services: Petroleum.

Austin Jet Corporation
P.O. Box 13063
Austin, TX 78711
☎512-472-8739 ☐322353
President/CEO: Kirk Hays
V.P., Helicopter Marketing & Operations: Ron Bower
Avionics Manager: Matt Gordon
Director of Maintenance: Tom Hoover
Services: Buy and sell used Bell helicopters in international market. Major airframe engine and avionics work on helicopters.

(86) **Avco Lycoming/Williamsport Division**
652 Oliver Street
Williamsport, PA 17701
☎717-323-6181 ☐841415
President: Howard M. Knutson
Senior Vice President: Duane J. Drees
Vice President/Sales: Terence R. Passey
Services: Engine manufacturer.

Avco Lycoming/Stratford Division
550 S. Main Street
Stratford, CT 06497
☎203-385-2000 ☐964242
President: John R. Myers
Vice President, Marketing/Programs: Martin J. Leff
Manager, Marketing Communications: Louis P. Savenelli
Director, Aviation Engine Marketing: Joseph A. Mauriello
Services: Manufacturer of military/commercial aviation, vehicular & marine gas turbines. Complete maintenance operation center for all repairs and engine overhauls.

Avfuel Corporation
625 State Circle
Ann Arbor, MI 48104
☎313-663-6466
President: Craig R. Sincock
Vice President: Craig M. Faiman
V.P., Marketing/Sales: William B. Light
V.P., Public Relations: Bob Shepherd
Services: Nation's leading independent supplier of aviation fuels. Distributors for: Phillips, Shell, Sun, Amoco, Boron, Sohio, Union 76, Conoco, and Avfuel Brand.

Aviall
P.O. Box 7086
7555 Lemon Avenue
Dallas, TX 75209
☎214-357-1811 ☐730601
President: R.G. Lambert
Vice President/Marketing: James R. Rigby
Executive V.P./General Manager: Peter D. Blakely
Services: Major worldwide repair source for airline and general aviation & distributor of aircraft part & supplies. Aircraft support services.

Aviation Analysis, Inc.
P.O. Box 3570
Carson City, NV 89702-3570
☎702-246-5023
President: Gary P. Cocanour
V.P. Marketing/Sales: William J. Bryk
Services: Aviation department management system. Dispatching, record keeping, accounting, inventory and maintenance computer software.

Aviation Business Consultants, Inc.
7507 S. Tamiami Trail, Suite 176
Sarasota, FL 33581
☎813-921-4941
President: Stephanie V. Slavin
Vice President, Marketing: Max A. Williams
Administrative Assistant: Anette Le Pome
Services: Heliport development/master planning.

Aviation Consulting Inc.
1615 Northern Boulevard
Manhasset, NY 11030
☎516-627-7676 ☐647044
Executive Vice President: John J. Dugan
Senior Vice President: John L. Conte
Vice President: Noel G. Preston
Senior Associate: Richard C. Bullard
Services: Safety evaluations, helicopter comparative evaluations and fleet plans, helicopter and equipment appraisals, mishap investigations, and market planning.

Aviation Equipment Maintenance Magazine
7300 N. Cicero Avenue
Chicago., IL 60646-1696
☎312-588-7300
Publisher: Jack J. Howlett, II
Editor: Paul Berner
Public Relations: Arthur J. Kinnune
Services: Monthly magazine for persons involved in professional maintenance, repair, overhaul and modification of fixed and rotary wing aircraft and ground support equipment.

(102) **Aviation Instrument Manufacturing Corp. (AIM)**
817 Dessau Road
Austin, TX 78753
☎512-251-2351 ☐767130
President: Don Castleberry
Vice President/General Manager: Don Bigbee
Vice President, Avionics: Dale Castleberry
Marketing Manager: Russell K. Mullins
Services: Avionics and instrument manufacturer.

(103) **Aviation Instrument Services**
12213 S.W. 131 Avenue
Building A-7
Miami, FL 33186
☎305-251-7200 ☐52-5110
President: James J. Sensale
Services: Sale or exchange of all types of helicopter instruments. We also purchase used instruments.

Aviation Materials INC
HELICOPTER PARTS AND COMPONENTS
ALL PARTS
40 to 60%
BELOW
RETAIL
New OHC and SAR Parts

We Offer Over 100 Years Combined Experience in Aviation Maintenance

TELEPHONE
800-238-6154
Telex
53872

INTERNATIONAL AIRPORT
4300 SWINNEA ROAD
MEMPHIS, TN 38118

European Agent
CHASE INT'L LTD.
Little Uplands
Droxford Hampshire
5031QL England
Contact
ROBIN GUSSMAN
(0489) 877814
TLX 477046 ROBIN G

⑲ **Aviation Maintenance Publishers, Inc.**
P.O. Box 36
1000 College View Drive
Riverton, WY 82501-0036
☎307-856-1582
President: Jerry L. Williams
National Marketing/Sales Rep.: James G. Davis
Vice President/Editor: Dale M. Hurst
Services: Publish monthly aviation maintenance magazine, "International Aviation Mechanics Journal"; publish various aviation maintenance and pilot training manuals. (Free Catalogs available).

Aviation Office of America Inc.
Love Field
Terminal Building
Dallas, TX 75235-1400
☎214-353-1400 ☐73363
President: Peter O'Grady
Vice President/Marketing: William H. Gossell
Services: Underwriters providing worldwide facilities for all forms of aviation insurance.

Aviators Hot Line
2742 First Avenue, South
Fort Dodge, IA 50501
☎800-247-2244 ☐9105202496
President: Joseph Peed
Vice President: Richard Bennett
Travel Coordinator: Carol Tell
Services: Advertising

Avio Sales & Service Corp.
P.O. Box 374
Holmdel, NJ 07733
☎201-671-0873 ☐756483
President: Lawrence G. Smith
Services: Manufacturers representatives (sales).

Avmar Incorporated
1038 Santerre Drive
Grand Prairie, TX 75050
☎214-641-4677 ☐730211
General Manager: Thomas Dimuro
Services: Hydraulic research service center for Abex, Aerospatiale and Ronson.

B & D Instruments, Inc.
209 W. Main Street
Valley Center, KS 57147
☎316-755-1223 ☐437067
President: Howard P. Botts
Vice President/Marketing: David D. Dahl
V.P., Public Relations: John K. Nims
Sales Manager: Dennis Snyder
Services: Manufacture true airspeed computers with cockpit and cabin digital displays, aircraft engine instruments, aircraft ordinance signs and utility lights.

The BF Goodrich Company
500 S. Main Street
Building 17-F; Department 1806
Akron, OH 44318
☎216-374-3600 ☐423294
Vice President, Aerospace: R. Langford
Manager, Marketing/Sales: John M. Hearty
Marketing Manager: W. H. Dausey
Services: Ice protection systems, erosion materials, flotation systems, life vests, tires, wheel & brakes, rotor brakes.

BVR, Inc.
P.O. Box 6336
Rockford, IL 61125
☎815-874-2471 ☐25-7332
President/CEO: Roger G. Glavin
Vice President/Sales: Charles E. Alberts
V.P. Engineering: Charles Schiferl
Secretary/Treasurer: E.L. Madru
Services: Manufacture of ADI, HSI, BDHI,RMI, CDI, ADF.

Baker Electronics, Inc.
1734 Northgate Boulevard
Sarasota, FL 33580
☎813-355-7625 ☐803720
President: E.E. Baker
Vice President/Marketing: Eugene A. Sway
Assistant Director/Marketing: Robert Duffield
Services: Manufacturer of aircraft pilot and cabin audio systems, includes passenger briefing systems and stereo/chime/page systems.

Barfield Instrument Corp.
4101 N.W. 29th Street
Miami, FL 33142
☎305-871-3900 ☐518808
Chief Executive Officer: J.W. Barfield
President: Preston Barfield
Atlanta Branch Manager: Ernie Kennemore
Vice President, Service: Neil Cole
Services: A/C instrument overhaul & exchange service. Manufacturer of ground support test equipment.

Bayly Martin & Fay Aviation Insurance Services Inc.
3200 Wilshire Boulevard
Los Angeles, CA 90010
☎213-386-8120 ☐674671
President: Ronald A. Hill
Senior Vice President: Richard Gorsuch
Executive Vice President: William Baxter
Vice President: Roger C. Gustafson
Services: Full service, multi-line insurance brokerage firm. Aviation offices in Anchorage, Washington, California and Philadelphia.

Bayly Martin & Fay of Washington, Inc.
2001 Sixth Avenue, Suite 1050
Seattle, WA 98121
☎206-441-1400 ☐68-38028
Chairman: Elliott S. Tremaine
President: Anthony H. Cowan
Vice President: Lila Benson
Aviation Production: Michael Weaver
Services: International aviation insurance brokers. We specialize in insuring commercial helicopter operators.

(94) **Bayly, Martin & Fay, Inc.**
1700 Market Street
Philadelphia, PA 19103
☎215-561-5700 ☐834567
Senior Vice President: Robert C. Smith
Vice President: Anne B. Salemmo
Services: All forms of aviation insurance.

Beaufort Air-Sea Equipment Limited
Beaufort Road, Birkenhead
Merseyside, L41 1HQ, England
☎051-652-9151 ☐629478
President: A. Thomson
Vice President/Marketing: M.J. Corbett
Export Manager: P. Stavropoulos
Services: Designer and manufacturer of safety and survival equipment including liferafts, lifevests, and immersion suits.

Bell Helicopter Asia (Pte) Limited
50 Loyang Way
Singapore 1750, Singapore
☎65-542-2422 ☐RS50555
Managing Director: William J. Maddox Jr.
Customer Support: Jim Tugley
Controller: Donald C. Pantle
Services: Helicopter marketing, spares support, technical support and training.

㊶ **Bell Helicopter Textron Inc.**
P.O. Box 482
Fort Worth, TX 76101
☎817-280-2011 ☐758229
President: Leonard M. Horner
Vice President, Marketing: Dwayne K. Jose
V.P., Commercial Marketing: James A. Hamilton
Director, Public Affairs: Carl L. Harris
Director, Safety & Certific.: Paul R. Powers
Chief of Training: Loren Doughty
V.P., Government Marketing: Brennon R. Swindell
Services: Rotary wing aircraft manufacturer, sales new and used helicopters.

Bendix General Aviation
Avionics Division
2100 N.W. 62nd Street
Fort Lauderdale, FL 33310
☎305-928-2100 ☐5109559884
President/CEO: D. Travis Engen
Vice President, Marketing: Curtis H. Roberts
Public Relations: Dale Smith
Manager, Marketing Services:
Nancy Lee Petrowski
Services: Design & manufacture of airborne electronics (avionics) including electronic flight instruments (EFIS), COM/NAV/Pulse & digital radar systems.

A. Biederman, Inc.
P.O. Box 25003
Glendale, CA 91201-3095
☎818-246-8431 ☐315994
President: Richard Rockwood
Vice President: Steven W. Williamson
Director of Purchasing: Peter J. Maher
Services: Sales and service of aircraft and industrial instrumentation.

Boeing of Canada Ltd.
99 Murray Park Road
Winnipeg, MB, R3J 3M6, Canada
☎204-888-2300 ☐0757309
Vice President: Lyle L. Bryson
Director/Marketing: E. Murray Sloane
Technical Sales Manager: Robert (Bob) D. Palmer
Services: Aircraft component manufacturer, repair and overhaul of plastics.

(C3) **Boeing Vertol Company**
P.O. Box 16858
Philadelphia, PA 19142
☎215-522-2121 ☐845205
President: Joseph Mallen
Director/Marketing: John Hayden
Vice President/Engineering: Ken Grina
Vice President/JVX Program: C.W. Ellis
Director/Helicopter Products: W.P. Jones
Services: Helicopter manufacturer.

Bow Rotors
Division of Bow Properties Inc.
P.O. Box 4054
Lancaster, CA 93539-4054
☎805-942-5770 ☐322316
President: Ian Bowker
Secretary-Treasurer: Mindy J. Putnam
Services: Helicopter consultants. Leasing brokering and component locator services.

Brackett Aircraft Co., Inc.
7045 Flightline Drive
Kingman, AZ 86401
☎602-757-4005
President: Robert R. Brackett
V.P., Marketing/Sales: Rex C. Sagely
Services: Brackett Aircraft manufactures external drop hooks and platforms, helicopter movers, and engine air filters.

Breeze-Eastern
Division of Transtechnology Corp.
700 Liberty Avenue
Union, NJ 07083
☎201-686-4000 ☐138212
President: Ralph Hutchins
Vice President Marketing/Sales: Larry O'Shaughness
Customer Service Supervisor: Zoltan J. Varsanyi
Services: Manufacturer of aircraft accessories, winches, hoists, air personnel & cargo rescue hoists, gear boxes, antenna drives, tie downs, release hooks, actuators & missile launchers.

Breitling, Halcyon Watch Co.
47 Water Street
Norwalk, CT 06854
☎203-853-2141
President: Brian Pennell
Booth Coordinator: Gregory Gladstone
Services: Watch importing and sales.

Bristol Aerospace Limited
P.O. Box 874
Winnipeg, MB, R3C 2S4, Canada
☎204-775-8331 ☐0757774
President: J. A. Bowden
Vice President/Marketing: Keith F. Burrows
Vice President/Operations: D.G. Malaher
Marketing Manager: Robert R. Dungey
Services: Repair and overhaul of rotary wing aircraft. Manufacturer and distributor of wire strike protection system-helo transmission test-composites.

㉒ **Business & Commercial Aviation**
(News America Corporation)
㉓ Hangar "C-1"
Westchester County Airport
White Plains, NY 10604
☎914-948-1912 ☐a
Publisher: David W. Ewald
Editor & Associate Publisher: John W. Olcott
Advertising Director: G.S. Worden
Services: Monthly business magazine serving worldwide fixed and rotary wing aircraft.

C.E. Heath & Co. (Aviation) Ltd.
150 Minories
London, EC3N 1NR, England
☎01-488-2488 ☐8813001
Executive Director: R. Marsh
Services: Insurance Brokers.

C.P. Waggoner
P.O. Box 531667
Grand Prairie, TX 75053
☎214-988-0376
General Manager: William C. Turner
Sales Representative: Jeffery E. Rogers
Services: Aircraft sealants and acrylics.

CMI Aircraft Corporation
2600 Telegraph Road
P.O. Box 2600
Bloomfield Hills, MI 48303
☎313-456-0000 ☐499-4188
Vice President: William M. Demery
National Remarketing Manager: Steve Varsano
Director of Marketing: Louis C. Seno

(45) **California Helicopter International**
11601 Pendleton Street
Sun Valley, CA 91352
☎818-767-2032 ☐677331
President: Gary Podolny
Executive V.P. Marketing: Harry R. Smith
Vice President/General Manager: W.E. Jake Daugle
Services: Airframe remanufacturing, conversion and overhaul/repair station (FAA certified).

John Cameron Aviation
Hangar 473
Bankstown Airport
Sydney, NSW, 2200, Australia
☎02-707-2011 ☐72716
President: J.W. Cameron
Chief Engineer: R.J. Stark
Services: Manufacturer of helicopter accessories.

Camp Systems, Inc.
Long Island MacArthur Airport
Ronkonkoma, NY 11779
☎516-588-3200 ☐144577
President: Daniel J. Ryan
Executive Vice President: Wayne G. Hoppner
Vice President/Operations: Anthony F. Costa
Vice President/Sales & Service: Robert B. Leonard
Services: Computerized aircraft maintenance, dispatch and inventory control.

Canadair Limited
P.O. Box 6087
Station A
Montreal, PQ, H3C 3G9, Canada
☎514-744-1511 ☐05826747
Supervisor/Exhibits & Displays: G. Bond
Services: Airframe manufacturer.

Canadian Marconi Company
Avionics Division
2442 Trenton Avenue
Montreal, PQ, H3P 1Y9, Canada
☎514-341-7630 ☐05827822
V.P. Avionics Division: L. Leveille
Group Mgr., Commercial Avionics: G. Gibbs
Mktg. Mgr., Commercial Avionics: H. Schlachta
Mgr. Marketing Services: Roger Hart
Services: Design, manufacture and marketing of avionics products and ground-based navaids (MLS,ILS,VOR,DVOR).

Cardion Electronics
895 Waverly Avenue
Holtsville, NY 11742
☎516-289-6200 ☐5102282653
President: Paul Holcombe
Vice President, Marketing: James Murphy
Vice President, NAV/AID: Allen Greenberg
General Marketing Manager: William C. Hackenberg
Services: FAA approved FAR Part 171 heliport ground avionics eligible for funding under the Airport/Helicopter Improvement Program (AIP).

Carter Engineering Co., Inc.
232 S. Glasgow Avenue
Inglewood, CA 90301
☎213-649-0111 ☐9103286181
President: G.W. Carter
Director of Marketing: C.R. Wilson
Chief Engineer: George Leventis
Services: Manufacturer & distributor: headsets, helmets, microphones, audio mixer systems, airborne searchlights and PA/siren units.

(106) **Casey Copter Accessories, Ltd.**
P.O. Box 121
Mtl AMF
Dorval, PQ, H4Y 1A5, Canada
☎514-636-6155 ☐05-821574
President: Anthony J. Casey
Vice President/Marketing: Michael J. Casey
Services: Manufacturer of Casey Shroud Heaters and air conditioners for Bell 206, Hughes 500, MBB BO105 and Agusta 109.

(58) **Castleberry Instruments & Avionics**
817 Dessau Road
Austin, TX 78753
☎512-251-3441 ☐767130
President: Don R. Castleberry
General Manager: D. Bigbee
Marketing Manager: Russell Mullins
Manager, Rotary-Wing: Michael J. Morgan
Services: New/exchange sales, overhaul/repair/certification of rotor-wing & fixed-wing aircraft instruments.

Cessna Aircraft Company
P.O. Box 12730
Wichita, KS 67277
☎316-946-7583 ☐417445
General Manager: Bill Hogan
Sales Manager: Gordon Collins
Manager, Administration: Roger Martin
Services: Largest manufacturer of general aviation aircraft, sales and manufacturers.

Chadwick, Inc.
11969 S.W. Herman Road
Sherwood, OR 97140
☎503-692-0570 ☐360652
President: Russell D. Chadwick
Executive Vice President: Margie L. Chadwick
Vice President, Marketing: Daniel Graaf
Marketing Manager: Laurie Parsons
Services: Manufacturers of agricultural, cargo, fuel, fire-fighting systems, and electronic aircraft scales for ground support.

Chadwick-Helmuth Co.
4601 N. Arden Drive
El Monte, CA 91731
☎213-575-6161 ☐194271
President: James Chadwick
Field Services Engineer: Roger Fick
Services: Track & balance equipment used on helicopter and propeller rotors. Manufacturer of VIBREX.

Champion Spark Plug Company
P.O. Box 910
Toledo, OH 43661
☎419-535-2461 ☐212532
Director, Aviation Sales: Robert D. O'Donnell
Services: Manufacturers of aviation spark plugs, jet igniters, oil filters.

Chandler Evans
Control Systems Division
1 Charter Oak Boulevard
West Hartford, CT 06101
☎203-236-0651 ☐99285
President: Jack O. Nash
Vice President/Marketing: John M. Maljanian
Manager/Product Support: F. DeFronzo
Services: A leading manufacturer of helicopter jet engine fuel controls, fuel pumps and missile flight controls.

Chase, Rotchford, Drukker & Boguet
606 S. Olive Street
Los Angeles, CA 90014
☎213-626-8711
Partner: Vincent Fish
Services: Aviation defense law firm.

Chelton, Inc.
P.O. Box 711
Lewisville, TX 75067
☎214-221-1783 ☐795555
President: Geoff Cooper
Vice President: William J. Garlough
Marketing Director: Michael S. Wilkerson
Services: Manufacturers of antennas, homing systems, static dischargers and test equipment.

Christie Electric Corporation
20665 Manhattan Place
Torrance, CA 90501
☎213-320-0808 ☐910-349-6260
President: Tom E. Christie
Sales Manager: Bill Sewalk
Vice President, Marketing: Fred Benjamin
Services: Christie manufactures high current DC power supplies and battery chargers and ground power support equipment for the helicopter industry.

Chromalloy Compressor Technologies
P.O. Box 20148
4430 Director Drive
San Antonio, TX 78220
☎512-333-6010 ☐767480
Technical Support Rep.: Dale H. Farnsworth
Vice-President/General Manager: Fred Spagnoletti
Director of Operations: Ron Slothower
Director of Advanced Technology: Leonard Hampson
Services: Overhaul, repair and coatings of gas turbine components.

Chromalloy Division-Oklahoma
1720 National Boulevard
P.O. Box 10699
Midwest City, OK 73034
☎405-732-6811 ☐748599
Executive Vice President: James L. Reum
V.P. Marketing & Engineering: Daniel R. Stoller
Director of Marketing: E. Eldon McDonald
Marketing Manager: Edward E. Groseclose
Services: Manufacture, overhaul and repair of turbine engine components.

(111) **David Clark Company Inc.**
360 Franklin Street
Worchester, MA 01604
☎617-756-6216 ☐920482
President: John E. Flagg
Vice President: Darald R. Libby
General Sales Manager: Robert J. Murphy
Aviation Products Manager: Ronald F. Premo
Services: Manufacturer of noise attenuating headsets with noise cancelling microphones and voice activated intercoms.

Collins Avionics
Rockwell International
400 Collins Road, N.E.
Cedar Rapids, IA 52498
☎319-395-2978 ☐464421
President, Rockwell Int'l: Donald R. Beall
President, Collins: James L. Churchill
Exhibits/Marketing: Raymond A. Walsh
Services: Manufacturer of flight control, navigation and communication systems.

Communications Specialists Inc.
426 W. Taft Avenue
Orange, CA 92665-4296
☎800-854-0547
President: Spence A. Porter
Vice President, Marketing: Mike Beveridge
Chief Pilot: Mike Klein
Services: Manufacturer of the TR-720 handheld airband transceiver.

Composite Technology, Inc.
P.O. Box 8219
Stockton, CA 95208
☎209-466-4285 ☐359435
President: Timothy J. Hachman
Vice President, Operations: Dana H. Kerrick
Services: Repair, overhaul, sales & rental of main and tail rotor blades. Factory and FAA authorized service center for composite and metal blades.

Computer Training Systems, Inc.
218 Rue Louis XIV
Suite D
Lafayette, LA 70508
☎318-984-1096
President: James Boots
Vice President, Sales: James R. Boots
Services: Helicopter computerized training.

Computing Technologies For Aviation (CTA)
P.O. Box 7624
Charlottesville, VA 22906
☎804-971-7624
Chairman: Neil A. Armstrong
President: C.E. Cook, Jr.
Vice President: F. Powell
Manager: Page Wittkamp
Services: Computing services: scheduling, reports, maintenance, airline interface, weather and flight plan interface in house.

Concorde Battery Corporation
2009 San Bernardino Road
W. Covnia, CA 91790
☎818-962-4006
President: Paul Godber
Marketing Manager: John Timmons
V.P., Engineering: J. A. Orsino
Sales: Don Godber
Services: Manufacture a complete line of lead acid aircraft batteries and ground support equipment batteries.

Connecticut Machine Products, Inc.
45 Davids Drive
Hauppauge, NY 11788
☎516-231-9400 ☐14-4646
President: David A. Yarom
Vice President: Isaac Robinson
Dir., International Marketing: Henry Rom
Services: Manufacturer and supplier of spare parts for helicopter engines and airframe.

Costruzioni Aeronautiche
Giovanni Agusta S.p.A.
Via Sicilia 43
00187 Rome, Italy
☎0331 220478 ☐332569
Honorary Chairman: Corrado Agusta
Vice President: Pietro Fascione
Services: Manufacturer of Agusta designed helicopter. Sikorsky, Bell and Boeing Vertol overhaul and repair.

Custom Aircraft Completions
333 Industrial Avenue
Teterboro Airport
Teterboro, NJ 07608
☎201-288-9050 ☐642872
President: Patrick Cesaro
Vice President, Marketing: Jane Palkoski
Vice President, Operations: Fred Viasso
Services: Design, modification and completions of rotor wing & fixed wing aircraft interiors, avionics installation & repair, and freon air conditioning installation.

(173) **Cyberstar**
5000 Flightline Drive
Santa Rosa, CA 95401
☎707-546-2222
Chief Operating Officer: Jim Thomas
Marketing Manager: Steven Rossiter
Service Manager: Carl Hewes
Marketing Adminsitrator: Gayle Fitzgerald
Services: Design and manufacture turbine engine monitor system, bar graph engine indicators with solid state design and Bard data computer.

D + C- Airparts Corporation
P.O. Box 700
Hialeah, FL 33011-0700
☎305-887-7314 ☐515575
President: Michael P. Carrabba
Vice President, Marketing: Robert F. Carbon
Vice President, Production: Angel J. Palacio
Office Manager: M.A. Flynn
Services: Repair and overhaul of all types and manufacturers of nickle cadmium batteries and cells. Manufacturers of related test equipment.

Dale & Company Limited
1155 Dorchester Boulevard West
Suite 2400
Montreal, PQ, H3B 3Z3, Canada
☎514-866-6561 ☐05560156
National V.P./Aviation Div.: Jacques Rene de Cotret
Services: Aviation insurance brokerage company.

Daniel Systems, Inc.
Hangar 102
Opa Locka Airport
Opa Locka, FL 33054-2327
☎305-685-6286 ☐518748
President: Raymond Shinkle
Vice President, Marketing: Gareth Schuler
Services: Computerized aviation systems covering helicopter maintenance, spares inventory, flight logs and scheduling.

Daniels Manufacturing Corp.
6103 Anno Avenue
Orlando, FL 32809
☎305-855-6161 ☐564321
President: William A. Daniels
Vice President, Marketing: George G. Daniels
Director of Public Relations: Thomas J. Dedo
Sales & Marketing Manager: John Jago-Ford
Services: Connector maintenance systems, ground support equipment, hand and tool kits.

Dart Aero Systems Inc.
5811B Cedarbridge Way
Richmond, BC, V6X 2A8, Canada
☎604-270-2313 ☐04-357705
President: Jim Bradley
Vice President: Linda Bradley
Services: Manufacturer and distributor of the (EMPRA) Emergency Multiple Person Rescue Apparatus for the offshore oil and marine rescue industries.

Dayton-Granger, Inc.
3299 S.W. 9th Avenue
Fort Lauderdale, FL 33315
☎305-463-3451 ☐5109559760
President: J.D. Cline
Executive Vice President: G.D. Cline
Vice President, Marketing: Jerry Fricke
General Manager, Martech, Inc.: Jack Chapdelaine
Services: Manufacturer of airborne antenna systems, electrostatic protection equipment, lightning protection devices and portable survival radios.

(69) **De Vore Aviation Corporation**
6104B Kircher Boulevard, N.E.
Albuquerque, NM 87109
☎505-345-8713 ☐660436
President: Gilbert De Vore
Vice President, Marketing: Jonathan Bent
Assistant Marketing Rep: Richard Carr
Vice President, Engineering: Arnold Robinson
Services: Manufacture tel-tail rotor lights, forward facing recognition lights and heli-plast visual approach aid system. System design & consulting.

Delta Rotorcraft Ltd.
Vancouver Airport South
4400 Agar Drive
Richmond, BC, V7B 1A3, Canada
☎604-276-9878 ☐04-357597
President: Daniel T. Dunn
Marketing Manager: Kenneth C. Blackwood
Chief Inspector: Fred Baker
Services: Complete helicopter support. Component O/H, major A/F inspection & repair, line maintenance, avionics instruments & repair, A/C painting & N.D.T.

Dome & Margolin, Inc.
2950 Veterans Memorial Highway
Bohemia, NY 11716
☎516-585-4000 ☐5102286502
Vice President, Marketing: Richard O'Neill
Services: Airborne communications/navigation antennas & search and rescue equipment including ELT's and homing systems.

Downing Electronics, Inc.
10218 Donna Avenue
Northridge, CA 91324
☎213-360-3791
President: James R. Downing
Services: Manufacturer of heliport lighting systems and prefabricated heliports.

Eastern Aero Marine
3850 N.W. 25th Street
Miami, FL 33142
☎305-871-4050 ☐514737
President: Samuel Oroshink
Sales Manager: Ross M. Hallen
Services: Eastern Aero Marine manufactures air/sea survival equipment, FAA repair station No.4341, inflatables and compressed gas systems.

Eastern Aircraft Structural Repairs
P.O. Box 322
Arnprior, ON, K7S 3H6, Canada
☎613-623-6593 ☐053-4111
General Manager: F.J. Misset
Marketing Manager/Chief Insp.: F.J. Andrews
Services: Rotary aircraft repair & rebuild.

Electronic Display Systems Inc.
321 Topaz Drive
Hatfield, PA 19440
☎215-822-6090 ☐84-6113
President: Dr. Derick Jones
Director, Marketing: Frank LaVien
Marketing Assistant: Susan Steinley Bockmeyer
Director, Engineering: Neil Mazurek
Services: Manufacture dichroic/twisted mematic liquid crystal displays and modules for aerospace markets.

Ellason Weather Radar
Ellason Avionics, Inc.
739 Spirit of St. Louis Boulevard
Chesterfield, MO 63017
☎314-532-3031
President: Bill Ellason
Marketing Manager: Arnold Lane
Services: Manufacture ground based weather radar.

⑮ **Embry-Riddle Aeronautical University**
Center for Independent Studies
Star Route Box 540
Brunnell, FL 32010
☎904-673-3180
President/CEO: Kenneth L. Tallman
V.P./Chancellor-Int'l Campus: Charles S. Williams
Director, Public Relations: Ron Marlar
Director, Independent Studies: Thomas W. Pettit
Services: Receive college credit for your aviation experiences and earn an accredited Embry-Riddle Bachelor degree in the privacy of your own home through independent study.

Energy Tactics, Inc.
P.O. Box 400
Bohemia, NY 11716
☎516-924-5300
President: Stan Drake
Services: Electric power generators.

Enstrom Helicopter Corporation
Twin County Airport
P.O. Box 277
Menominee, MI 49858
☎906-863-9971 ☐263451
President & CEO: George B. Rahman
Vice President, Marketing: Paul L. Schultz
Vice President, Operations: Robert S. Kroll
Vice President, Engineering: Robert L. Jenny
Services: Manufacture three-place turbocharged piston-engined helicopters: models F-28F, 280F, and 280FX.

Executive Instruments, Inc.
P.O. Box 216
4141 Lindberg Drive
Addison, TX 75001
☎214-239-0231 ☐73368
Vice President: Wayne Holmes
Operations Manager: James R. Garrett
Services: Certified repair facility for instruments.

FAS-Orient (Pte) Limited
Changi P.O. Box 36
Singapore 9150, Singapore
☎5459-455 ☐26820
Managing Director: R.H. Knowles
Engineering Director: K.H. Chui
Marketing Director: Dinesh R. Patel
Quality Manager: N. W. Burton
Quality Control Manager: Norman Burton
Works Manager,Seletar Location: C.C. Pau
Services: Overhaul & supply of helicopter dynamic & hydraulic components, safety equipment, pressure valves, hose fabrication & other supply services.

FFV Maintenance
Aero Engineering Division
S-58182 Linkoping, Sweden
☎4613109100 ☐50026
President: Thure Svensson
Technical Manager, Aircraft: Hans Molander
Services: Repair, overhaul & modifications of helicopter airframes, hydraulic & fuel systems, dynamic components, rotor blades, radio-radar navigation, instruments & engines.

FPT Industries, Ltd.
The Airport
Portsmouth
Hampshire, P03 5PE, England
☎0705-662391 ☐86106
Managing Director: C.F. Cooper
Commercial Director: W.B.D. Wardle
Financial Director: C.J. Wall
President, FPT Inc.: E.J. Paisley
Services: Manufacture and repair/overhaul all types flexible fuel cells plus emergency flotation equipment and other inflatables.

Facet Enterprises, Inc.
Fluid Technology Group
8439 Triad Drive
Greensboro, NC 27409-9621
☎919-852-6800 ☐510-922-7331
Group Vice President: Vincent Riley
Director, Marketing: James F. Frahm
Supervisor, Inside Sales/Group Advertising: Dianne Vander Beek
Plant Manager: Anthony Simone
Services: Manufacturer of filters for hydraulics, lube oil filters, fuel filters, ground support, refueling, transmission filters, acoustic media.

⑧ **Fairchild Control Systems Co.**
1800 Rosecrans Avenue
Manhattan Beach, CA 90266-3797
☎213-643-9222 ☐9103256216
President: D.A. Petkelis
Director, Business Development: W.C. Waskey
Business Segment Director: M. Figoff
Manager, Marketing: J. Martin
Services: Lightweight, compact vapor cycle cooling systems designed to aerospace quality standards for helicopters and turbine driven aircraft.

Finalco Aircraft Leasing, Inc.
P.O. Box 3606
McLean, VA 22103
☎800-FIN-ALCO
President: Jon J. Prager
Product Manager, Aircraft: Donald G. Gies, Jr.
Services: Lease financing for corporate and commercial aircraft both fixed and rotary wing.

㊾ **Fitz-Wright Suits Ltd.**
17919 Roan Place
Surrey, BC, V3S 5K1, Canada
☎604-576-9424 ☐0450208
Vice President of Operations: Brian Zientek
Research & Development Manager: Peter Rowe
Sales Manager: Ron Ulman
Services: Manufacture safety apparel for marine use.

Flight Accessory Services
11310 Sherman Way
Sun Valley, CA 91352
☎213-875-2930 ☐698154
President: Gordon Rusk
Vice President/General Manager: Lynn Fortner
Vice President, Marketing: Richard Fortner
Marketing Administrator: Cyndi Hill
Services: Overhaul and repair of hydraulic flight controls.

Flight International Magazine
Business Press International
205 E. 42nd Street
New York, NY 10017
☎212-867-2080 ☐238327
U.S. Advertising Sales Mgr.: Dean Kelly
Services: Publishing.

Flight Suits, Ltd.
1675-D Pioneer Way
El Cajon, CA 92020
☎619-440-6976 ☐295478
President: James Wegge
Services: Manufacture flight suits, jackets, gloves, helmets. SPH-4 helmets and parts available.

FlightSafety International
Marine Air Terminal
LaGuardia Airport
Flushing, NY 11371
☎212-565-4100 ☐66586
President: A.L. Ueltschi
Executive Vice President: Bruce N. Whitman
Vice President, Marketing: James S. Waugh
Director, Goverment Affairs: Al Gleske
Services: Pilot/mechanic training. Pilot training school.

Flying Magazine
CBS
One Park Avenue
New York, NY 10016
☎212-503-4210
Publisher: Jay Durfee
Assoc. Publisher/Advertising: Dick Koenig
Editor: Richard Collins
Advertising Manager: Pat Luebke
Services: Publish Flying Magazine

Foster Air Data Systems, Inc.
7020 Huntley Road
Columbus, OH 43229
☎614-888-9502 ☐5101005279
President: Mike Smyser
Vice President, Sales: Dennis Schmidt
Services: Manufacturer of area and long range navigation systems; and multi-station tracking DME/TACANS.

Foxtronics, Inc.
6614 Waddell Avenue
Dallas, TX 75235
☎214-358-4425 ☐730647
President/CEO: Carl H. Fox
Secretary/Treasurer: Kay Owens
Production Support: Herman Wilson
Services: Avionics repair, GPU manufacture and repair, consultant.

Frasca International, Inc.
606 S. Neil Street
Champaign, IL 61820
☎217-359-3951 ☐206549
President: Rudy A. Frasca
Vice President, Marketing: John B. Huismann
Project Director: John A. Frasca
Project Director: L. Martin Hendrickson
Services: Manufacturer of rotary and fixed-wing flight simulators.

Frontier Pacific Aircraft Industries Inc.
3215 E. Spring Street
Long Beach, CA 90806
☎213-595-1261 ☐656485
President: Rick Schorling
General Manager: John A. Hauck
Director of Maintenance: Richard McNeely
Services: Helicopter sales, service, parts, manufacturing; FAA repair station 465:91; FP-1075 lead acid battery kit for Hughes 500 series helicopter.

Fuji Industries Corporation
2811 Wilshire Boulevard
Santa Monica, CA 90403
☎213-829-4774 ☐652476
President: Y. Nakano
Vice President, Marketing: K. Nakano
General Manager: Young Murakawa
Services: Exporters of helicopter parts.

Fujinon, Inc.
672 White Plains Road
Scarsdale, NY 10583
☎914-472-9800 ☐681115
President: Hitoshi Kawamura
General Manager, Special Products: Charles Y. Nemoto
Marketing Manager: J. Brooks
Services: Gyrostablized optic binoculars for air, sea, land — 10 x 40 and 14 x 40 power. (GSA contract FSCM 64991).

The GIC Group
P.O. Box 1291
15 River Street
New Rochelle, NY 10801
☎914-576-2702
President: Stephen G. Glatzer
Vice President: Joseph De Lorenzo
Assistant to the President: J. Goodman
Services: Manufacturers of emergency locator transmitters; direction finders; "Super Sensitive Receivers;" voltmeters; replacement batteries for ELTs.

Gables Engineering, Inc.
P.O. Box 140880
Coral Gables, FL 33114-0880
☎305-442-2578 ☐441107
President: Victor E. Clarke
Vice President, Operations: Charles E. Rogers, Jr.
Sales Manager: Terry Parsons
Director of Marketing: Don J. Brown
Services: Designers and manufacturers of digital and analog audio systems, single and multifunction frequency control systems, miscellaneous control and junction boxes.

The Garrett Corporation
9851 Sepulveda Blvd.
P.O. Box 92248
Los Angeles, CA 90009
☎213-776-1010 ☐2136704985
Vice President, Sales: R. Trusela
Director, Aircraft Propulsion: Ned Dobak
Corporate Manager, Exhibits: Richard E. Callison
Senior Chief Engineer: J.P. Frignac
Services: Engine & equipment manufacturer.

General Aviation Branch
Parker Hannifin Corporation
711 Taylor Street
Elyria, OH 44036
☎216-323-4676 ☐243414
Vice President, Eastern Branch: R.F. Ferrel
Group Director of Marketing: Kent R. Kelly
Account Mgr./Aftermarket Sales: Sydney F. Reames
Account Mgr./Aftermarket Sales: Rodger F. Dickson
Services: Centralized marketing group for Parker general aviation divisions which manufacture aircraft fuel products, pneumatic & hydraulic systems and components.

Stay off the rocks with our little box.

Avoid forced landings from engine failure with the Cyberstar Model 901 Turbine Engine Monitor. A simple, onboard, computer-based monitor, this small box provides printed data on five critical engine parameters. The 901 enhances safety, and pays for itself fast by making your maintenance program more cost-efficient.

Cyberstar
P.O. Box 49
Fulton, California 95439
(707) 546-2222

32A **General Electric Company**
1000 Western Avenue
Lynn, MA 01910
☎617-594-7617 ☐6817065
General Manager: L.A. Bevilacqua
Manager, Press Relations: Robert Salvucci
Services: Development & manufacture of helicopter engines for military and commercial use.

General Electric Credit Corp.
206 Danbury Road
P.O. Box 804
Wilton, CT 06897
☎203-834-1105
Manager of STAR: Larry Bossidy, Jr.
Operations Manager: Andrew C. Holmes
Services: Financing and leasing of new and used helicopters.

Geophysical Service Inc.
Mail Station 3407
P.O. Box 225621
Dallas, TX 75265
☎214-995-7680
Vice President: Harry Lake
Personnel: Al Wynn
Safety: Bill Turney
Aviation Safety: Peter E. Laux
Services: Geophysical. Oil and gas exploration.

Georgetown Aircraft Services
Sussex County Industrial
Airpark
Georgetown, DE 19947
☎302-856-7333 ☐508850
President: Thomas Gollicker
Vice President: Parker Meegan
Services: Aircraft interior, exterior, avionics, modification and completions.

Geostar Corporation
101 Carnegie Center
Suite 302
Princeton, NJ 08540
☎609-452-1130
President/CEO: Gerard K. O'Neill
Vice President, Marketing: Michael J. Breslin
Vice President/Administration: T. Stephen Cheston
Vice President/Research & Tech.: Leslie O. Snively
Executive Assistant: Valerie J. Hallgren
Services: Research and development, communications.

Geteca, USA-France
5535 Balboa Boulevard
Suite 202
Encino, CA 91316
☎213-995-3655
President: Jean-Claude Parmentier
Executive Vice President: Arnold Brema
Services: Representing major French aircraft and aerospace equipment manufacturers in North America.

Global Systems, Inc.
2144 Michelson Drive
Irvine, CA 92715
☎714-851-0119 ☐681340
Vice President/General Manager: J. Douglas Cline
Vice President/ Marketing: Gary Glynn
Manager, Marketing Services: Michael Sodern
Services: GNS-500 VLF/OMEGA Navigation System. NDB-2 Navigation Data Bank.

Golar Metal, Inc.
Box 247
Lionville, PA 19353
☎215-363-5864 ☐322233
President: Jan Hansen
Sales Manager: Gerard E. Bourgeault
Services: Aluminum helicopter decks.

BF Goodrich Company
Engineered Rubber Products
Aerospace & Defense Division
500 S. Main Street
Department 1815
Akron, OH 44318
☎216-374-4033 ☐88715
Sales/Marketing Manager: David B. Smith
Services: Emergency flotation systems, auxiliary flotation collars, salvage equipment, avionic/zipper panels, engineered rubber products for aerospace.

Graphic Datakits International
P.O. Box 8446
Fort Worth, TX 76124
☎817-451-2151 ☐732561
President: James S. Neely
Vice President, Marketing: Jim Brown
Services: Supply electrical connector tooling, including insertion & extraction tools. Manufacture connector tooling systems for A/C with instructions.

Gull, Inc.
395 Oser Avenue
P.O. Box 9400
Smithtown, NY 11787
☎516-231-3737 ☐968518
President: Peter D. D'Agrosa
Vice President, Marketing: Robert S. Hultmark
Sales: Walter Brown
Services: Instrumentation avionics manufacturing.

HELICOPTER International
75 Elm Tree Road
Locking, Weston-Super-Mare
Avon BS24 8EL, England
☎0934-822524 ☐44220
Publisher: Elfan Ap Rees
Vice President,Marketing/Sales: Linda L. Cook
Administrator, Subscriptions: Joan Probert
Services: Bimonthly international news magazine with regional columns for Canada, Offshore Europe, Pacific, ect. Plus fortnightly HELIDATA newsletter service.

HR Textron, Inc.
25200 W. Rye Canyon Road
Valencia, CA 91355-1256
☎805-259-4030 ☐651492
President: Samuel X. Garcia
General Manager: Dwayne P. Ehlers
Director, Int'l. Operations: A.J. Valdez
Field Service Manager: Robert L. Armbruster
Services: Manufacturer of hydraulic flight controls, electrohydraulic servovalves, fuel accessories & actuator associated electronics. Overhaul, repair, exchange, & spare sales.

Frank B. Hall Aviation
3200 Wilshire Boulevard
Los Angeles, CA 90010
☎213-386-3700 ☐194144
President: John Cizek
Executive Vice President: Joseph D. Mankawich
Senior Vice President: William Newell
Services: Specialists in aviation insurance of all types.

Hamilton Standard
Division of United Technology
Bradley Field Rd., M/S 1-2-18
Windsor Locks, CT 06096
☎203-623-1621 ☐994439
President: John Lovkay
Vice President, Marketing: Andrew Voorhis
Assistant to V.P., Marketing: Cliff Gerbe
Services: Manufacturer of environmental control, fuel control and flight control systems. Overhaul and repair of helicopter components.

Hansome Control Products
Hansome Energy Systems
365 Dalziel Road
Linden, NJ 07036
☎201-862-9044 ☐4914888
President: Harris Shapiro
Treasurer: Albert Reposi
Division Manager: Stanley Chait
Services: Manufacturer of ground power equipment battery powered with internal engine-generator/charger.

Hawker Pacific Pty Ltd.
408 Harley Crescent
Condell Park, NSW, 2200, Australia
☎02-708-8555 ☐AA21168
Managing Director: C.M. Ryland
Director: I.J. Blackie
Technical Manager: D.E. O'Neill
Sales/Service Manager: A.H. Hendry
Services: Maintenance/overhaul: rotary wing maintenance approval (D.O.A. Australia) up to 10,000KG. Allison 250, Continental & Lycoming piston engine overhaul. D.O.A. approved training school.

Hazeltine Corporation
Cuba Hill Road
Greenlawn, NY 11740
☎516-261-7000 ☐967800
President: S.J. Nuzzo
Vice President, Marketing: J.R. Colarusso
Director, Public Relations: J.W. Evans
MLS Marketing Manager: S. Leibman
Services: ICAO standard microwave landing systems for airports and heliports and special applications where precision IFR approaches are required.

Heavylift Marketing
330 N. Belt East, Suite 211
Houston, TX 77060
☎713-445-7113 ☐765615
Chairman of The Board: P. McGoldrick
Vice President: Alastair Macleod
Services: Represents airline specializing in long range transport of bulky and heavy air freight. Transport systems for helicopters.

Helicomb International, Inc.
6956 E. 13th Street
Tulsa, OK 74112
☎918-835-3999 ☐796168
President: Robert R. Austin
Services: Repair and manufacture of all adhesive bonded honeycomb assemblies. Military, commercial and all models of helicopters.

Helicopter Consulting Associates, Inc.
1502 N. Lowery Street
Porterville, CA 93257
☎209-781-4123 ☐682411
President: Ted L. Olson Jr.
Services: Cost analyses, model comparison surveys, heliport design, safety evaluations.

13 **Helicopter Leasing & Services, Inc.**
4616 W. Alva Street
Tampa, FL 33614
☎813-877-7670 ☐526590
President: Charles W. Brammer
Vice President, Marketing: William Jones
Services: Helicopter sales and service; Bell, Aerospatiale, Hughes, MBB approved factory service center; major structural repairs & overhaul.

Helicopter Logistics
P.O. Box 18387
San Antonio, TX 78218
President: Robert Nokes
Vice President, Marketing: John P. Sharp
Director, Public Relations: Y.V. Mireles
Sales Manager: L.W. Wickham
Services: Supplier of helicopter spare parts and tools (primarily Sikorsky), logistics consultants to operators (recommend spare inventories, etc.) Operational consultants to end-users.

Helicopter Services, Inc.
State Airport
Warwick, RI 02886
☎401-738-4055
President: Vincent V. Colicci
Secretary/Treasurer: Jesse G. Colicci
Supervisor, Maintenance: James R. Murphy
Chief Mechanic: Gregory A. Gouvin
Services: CRS station 4392, Bell service station, authorized Airwork service center.

Helicopter Support Australia
P.O. Box 777
Kununurra, 6743, Australia
☎091-682-129 ☐99873
Managing Director: John E. Clifford
Secretary: Carolyn I. Clifford
Services: Airframe, engine (piston) repair and overhaul, field servicing, Robinson service centre.

Helicopter Support, Inc.
P.O. Box 947
89 Marsh Hill Road
Orange, CT 06477
☎203-795-6051 ☐963550
President: Renzo J. Pierpaoli
Executive Vice President: David Adler
Treasurer: Mona Pierpaoli
Secretary: Jeanne Summit
Services: Helicopter parts distribution/component overhaul.

Helicopter Technology Co., Inc
P.O. Box 371515
Decatur, GA 30037-[illegible]51
☎404-981-7729
President/Owner: Harold W. Symes
Services: Provide services to operators; i.e. Siller Brothers & Rocky Mountain Helicopters, Inc.

Helicopter Welders of Canada Ltd.
6631D Elmbridge Way
Richmond, BC V7C 4N1, Canada
☎604-273-9681 ☐04355820
President: Croft W. Wilkinson
General Manager: W.C. (Bill) Gallop
Services: Airframe repairs for Bell, Aerospatiale and Hiller helicopters. Specialized welding, exhaust systems. Jig & fixture building for commercial & military airframes.

Helilease International Inc.
30 N. Raymond Avenue
Suite 406
Pasadena, CA 91103-3916
☎818-449-0753 ☐194250
President: Bruce D. Gray
Vice President, Marketing: Alfred T. Chisholm
Services: Leasing, financing & sales of select helicopter equipment along with consulting services to the industry.

Heliport Systems, Inc.
A-E Division
163 Madison Avenue
Morristown, NJ 07960
☎201-540-0011 ☐220883
President: William E. Davis
Vice President: Blair F. Baldwin
Engineer: Thomas F. Roth
Services: Professional heliport site selection, zoning and engineering design with special expertise in cost-effective rooftop heliport construction, fire protection, and refueling.

Helitune Ltd.
1 Graham Road
Malvern
Worcester, WR14 1HL, England
☎6845-69292 ☐335626
Managing Director: Noel E. Trigg
Director & General Manager: David A. Bloxham
Services: Rotor tracking/vibration analysis.

Hermetic Aircraft Instrument Corporation
200 Marine Street
Farmingdale, NY 11735
☎516-694-6780 ☐961329
President: William Brown
Vice President, Marketing: Michael J. Harvey
Executive V.P./General Manager:
Louis J. Francisco
Customer Service Supervisor: Joseph Golden
Services: Warranty, overhaul & repair agency for U.S. & European manufacturers, specializing in French manufactured equipment; also sales & distribution.

Hiller Helicopters
Wm. R. Fairchild International Airport
2140 W. 18th Street
Port Angeles, WA 98362
☎714-472-9494 ☐910-595-2843
President: Gerald J. Tobias
V.P. Sales & Marketing: Victor Milner
Services: Manufactures, sells, supports, worldwide UH12E "HAULER" agriculture helicopter, RH1100M "HORNET" light attack helicopter TOW & SCOUT configuration.

Hitchcock Industries, Inc.
3333 Hitchcock Drive
Dennison, TX 75020-8496
☎214-786-4444 ☐730294
Executive Vice President: Gregory T. Hitchcock
Services: Supplier of castings to helicopter manufacturers.

Hobart Brothers Company
1177 Trade Road, East
Troy, OH 45373
☎513-339-6000 ☐288265
President: W.H. Hobart, Jr.
Vice President/General Manager: R.P. Williams
Marketing Manager: James J. Hufford
Public Relations: T.M. Kendall
Services: Manufacture of ground power equipment for use in support for repairs and overhauls and starting assistance.

Honeywell Inc.
Commercial Aviation Operations
P.O. Box 889
Minneapolis, MN 55124
☎612-542-4511 ☐298110
Vice President/General Manager: J.R. Dewane
Director of Marketing: R.G. Raymond
Senior Marketing Represent.: Gary C. Hale
Marketing Manager: L.J. Vetter
Services: Manufacture laser inertial navigation products.

Hoover Industries, Inc.
P.O. Box 522337
Miami, FL 33152
☎305-888-9791 ☐514782
President: Ken Chase
Director/Sales & Marketing: Charles A. Floyd
Services: Manufacturer of FAA approved life rafts and life vests and survival kits.

Houston Casualty Company
13403 Northwest Freeway
Houston, TX 77040
☎713-462-1000 ☐775999
Vice President: Jim Hyberg
Vice President: Michael Donovan
Vice President: Don Thomas
Services: Insurance.

Howell Instruments, Inc.
3479 W. Vickery Boulevard
Fort Worth, TX 76107
☎817-336-7411 ☐758233
Chief Pilot: Paul Wheeler
President Overseas: Leon Becker
Services: Manufacturer of indicators and turbine testing equipment.

Howmet Turbine Components Corporation
475 Steamboat Road
Greenwich, CT 06830
☎203-661-4600 ☐643725
President/CEO: Charles Yaker
Senior Vice President: Joseph L. Mallardi
Senior Vice President: Harry J. Hamijian
Vice President: Michael E. Higgins
Services: Investment cast parts for turbine engines.

Hughes Aviation Services
P.O. Box 18428
Las Vegas, NV 89119-8428
☎702-739-1100 ☐684426
President: Walter D. Druen
Services: Fixed base operator.

Hynes Aviation Industies, Inc.
P.O. Box 697
Frederick Industrial Park
Frederick, OK 73542
☎405-335-7511 ☐955439
President: Michael K. Hynes
V.P., Administration: Gary J. Merritt
V.P., Technical Services: Kevin P. Hynes
Manager, Parts/Customer Service: Tom Shandor
Services: Repair station and training facility.

Imperial Oil Limited
Air Transport & Reservations
111 Saint Clair Avenue West
Toronto, ON, M5W 1K3, Canada
☎416-968-4111 ☐06524255
President: D.K. McIvor
Manager, Air Transport: D.E. Green
Services: Petroleum exploration - producing - manufacturing and marketing oil company.

Indianapolis Heliport Corp.
51 S. New Jersey Street
Indianapolis, IN 46204
☎317-262-3000
President: James M. Brown
Vice President: Victor J. Bandini
Vice President: Albert C. Michaels
Services: Full service helicopter FBO at prototype/demonstration heliport, fuel, heavy maintenance, storage, parking, rental cars, restaurant/lounge available. All major credit cards accepted.

Instrument Specialities Co., Inc.
1111 Stanley Drive
Euless, TX 76039
☎817-267-2651 ☐9108905711
President: Donald R. Bitts
Vice President: Lawrence Langkamp
Sales: Paul Brewner
Services: Manufacturer of Engine Instrumentation

Insurance Company of North America
120 Wall Street, Tenth Floor
New York, NY 10005
☎212-908-1083
Assistant Secretary: Michael Farmer
Manager: Thomas Dougherty
Vice President: Richard L. Richards
Director: Fred McGowan
Services: Aviation Insurance.

Insured Aircraft Title Service, Inc.
P.O. Box 19527
Oklahoma City, OK 73144
☎405-681-6663 ☐747192
President: Matthew Kelly
Vice President: Mary Miller
V.P., Data Processing: Larry Smith
Services: Aircraft title insurance, escrow and title services. Aircraft lists and labels, statistics, aviation microfiche library.

Inter Assessoria Aeronautica Ltda.
Av. Churchill 94-6 Andar
Rio de Janeiro, 20020, Brazil
☎021-220-3113 ☐2121529
Managing Director: Ary Granja
Technical Director: Cloanto L. Nogueira
Insurance Director: Mario P. Faria
Services: Aviation counsultancy for flight safety & accident prevention, maintenance evaluations, risk assessment, and aviation insurance.

㉔ **Interavia Publishing Group**
86, Av. Louis-Casai
1216 Cointrin-Geneva, Switzerland
☎22-98-05-05 ☐22122
Publications Director: Pierre Comdom
V.P. Interavia USA Inc.: F. Clinton Berry, Jr.
Associate Editor: Mark Lambert
Exhibitions Manager: Viveca C. Ott
Services: International publishing and information services in the aerospace and defense field.

Inventory Locator Service Inc.
3820 Premier Avenue
P.O. Box 18767
Memphis, TN 38118
☎901-794-4784 ☐882179
President: Fred W. Meyer
National Sales Manager: Robert Drake
Services: Provides on-line access to a data base of aircraft and aircraft parts.

Jaeger Aviation Corporation
2615 W. Casino Road
Suite 5B
Everett, WA 98204
☎206-355-7112 ☐329425
President: Raymond Briedelle
General Manager: Priscilla Fieldson Moore
Services: Sales and product support Jaeger manufactured equipment.

Fred S. James & Co. of Georgia, Inc.
500 Atlanta Financial Center
3333 Peachtree Road, N.E.
Atlanta, GA 30326
☎404-237-8444
Vice President: Graydon Hall
Assistant V.P./Aviation: Jeffrey R. Zito
Services: Insurance brokerage.

Jet Turbine Service, Inc.
3929 California Parkway
Fort Worth, TX 76119
☎817-536-0012 ☐709776
President: Peter LoBello
Vice President: Joe Penn
Director of Sales: Al Weser
Services: Buy and sell airframe and engine component parts.

Johnson & Higgins
95 Wall Street
New York, NY 10005
☎212-701-7580 ☐420027
Senior Vice President: A. Kent Robinson
Vice President: Gordon E. Clark
Vice President: Ronald Wilson
JHWF (Aviation Ltd.): Ralph S. Whyte
Services: Aviation insurance brokers.

KAMATICS Corporation
1330 Blue Hills Avenue
P.O. Box 3
Bloomfield, CT 06002
☎203/243-9704 ☐643201
President: A. Whitfield
Vice President: Jack Reed
Product Sales Manager: Paul DeCrisantis
Services: Self lubricating bridges, mechanical drive shaft couplings.

Kawasaki Heavy Industries, Ltd
Aircraft Group; World Trade Center
4-1 Hamamatsu-Cho 2-Chome
Minato-Ku, Tokyo 105, Japan
☎03-435-2971 ☐2424371
President: Kenko Hasegawa
General Manager, Aircraft Group: Masahiko Iwata
Senior Manager, Aircraft Sales: Keishiro Tanaka
General Manager, Aircraft Sales: Haguara Yoshiji
Services: Manufacturer of aircraft, aerospace equipment, jet engines, ships, rolling stock, industrial plant, heavy machinery and motorcycles.

Kell-Strom Tool Co., Inc.
214 Church Street
Wethersfield, CT 06109
☎203-529-6851 ☐994426
President: Francis P. Kelly
Executive Vice President: Thomas J. Kelly
Sales Manager: T.J. Kelly
Services: Manufacturer of aircraft service tools for Pratt & Whitney of Canada. Tools for all major engine manufacturers.

King Radio Corporation
400 N. Rogers Road
Olathe, KS 66062-1866
☎913-782-0400 ☐42299
President/CEO: Robert T. Cox
V.P. Marketing/Sales: R. Craig Christie
V.P. Public Relations: B.L. Glover Jr.
Advertising Manager: Kevin P. O'Hara
Director, Gen. Aviation Sales: Dan K. Walker
Services: Design, manufacture, distribute the most complete line of aircraft electronics, from simple transceivers to sophisticated EFIS systems.

Kinzie Industries, Inc.
P.O. Box 847
Alva, OK 73717
☎405-327-1565 ☐9108306644
President: Wayne E. Kinzie
Sales: Jim Robinson
Public Relations: Beverly Kinzie
Development: Paul Kinzie
Services: Parts, service and sales for Hughes Helicopters.

Eberhard Klemens
P.O. Box 3728
Oakbrook, IL 60521
☎312-579-0032
Owner: E. Klemens

H. Koch & Sons Division,
Wicks Manufacturing Company
5410 E. LaPalma Avenue
Anaheim, CA 92807
☎714-779-7000 ☐655424
President: Albert M. Brinkskele
Executive Vice President: William D. Raftery
Director of Marketing: Joseph A. Muklevicz
Director of Engineering: John Greenslade
Services: Life support equipment and emergency lighting.

Kollsman Instrument Company
Daniel Webster Highway South
Merrimack, NH 03054
☎603-889-2500 ☐943537
Vice President/General Manager: Ronald H. Wright
Vice President, Marketing: Joseph C. Allwarden
Vice President, Engineering: George Semanick
Manager, Avionics Marketing: William B. Shockley
Services: Altimeters, airspeed indicators, rate of climb indicators, radar altimeters, pneumatic test equipment, electro-luminescent displays.

Lawton-Byrne-Bruner Insurance Agency
10 Broadway
St. Louis, MO 63129
☎314-621-5540 ☐447228
President: Robert H. Larkin
Executive Vice President: Peter C. Reeves
Vice President of Aviation: Edward Quint
Services: Insurance Brokers.

Lear Chemical Research Corporation
1285 Britannia Road, East
Mississauga, ON, L4W 1C7, Canada
☎416-673-6192
President: Lynn W. McCleery
Administrator: Lise J. Pearson
Services: Manufacture of anti-corrosion products.

Leigh Instruments Limited
268 Queensview Drive
Ottawa, ON, K2B 8J9, Canada
☎613-820-9720 ☐0534129
President: Barry S. Flower
Director of Marketing: Michael A. Rowlands
Director of Public Relations: Bette Bowyer
Marketing Research Assistant: Judith Thomas-Range
Services: Designers and manufacturers of crash position indicators and ice detection systems for helicopters.

Lester Industries, Inc.
950 Isom Road
Suite 100
San Antonio, TX 78216
☎512-344-850[illegible] ☐767439
President: Les J. Paulick
Vice President, Marketing: Jim Paulick
Services: Distributor of aircraft and helicopter parts. Ground support equipment sales and service.

Lincoln Airpark
2893 Sunrise Boulevard
Suite 201
Rancho Cordova, CA 95670
☎916-635-1300
President: Sammy F. Cemo
Project Director: Charles L. Coker
Services: Airport development and construction.

Litton Industries, Inc.
Aero Products Division
6101 Condor Drive
Moorpark, CA 93021
☎805-378-2222 ☐662619
Director of Marketing: Joe E. O'Rendy
Director of Advertising: William Pyestner
Services: Inertial and omega navigation systems.

Litton Systems Canada Limited
25 Cityview Drive
Rexdale, ON, M9W 5A7, Canada
☎416-249-1231
President: R.R. Keating
Vice President, Marketing: T.J. McGuigan
Director: K.I. Evans
Director, Public Relations: C.W. Pittman
Marketing Manager: A.J. Steele
Services: Manufacturer of electronics.

Lockheed DataPlan, Inc.
90 Albright Way
Los Gatos, CA 95030
☎408-866-7611 ☐352132
President: Lou Reinkens
Director, Marketing/Communications:
Manuel Valencia
Senior Sales Representative: Dennis Steinbeck
Sales Manager: Steve Bandich
Services: Interactive, realtime aviation management information systems including MIS, scheduling & maintenance, on-line & personal weather briefings, graphics; computerized flight planning, international flight services.

Lord Corporation
Aerospace Products Division
P.O. Box 10039
1635 W. 12th Street
Erie, PA 16514-0039
☎814-456-8511 ☐914438
President: A. James Freeman
Vice President, Marketing: Edward J. Conway
V.P., Public Relations: Robert E. Alexander
General Manager: Robert C. Ditrich
Services: Manufacturers of elastrometric products for the helicopter industry, specializing in products and technology related to the reduction and control of shock, vibration, noise and accomodate motion.

Louis Newmark PLC.
80 Gloucester Road
Croydon
Surrey, CR9 2LD, England
☎01-684-3696 ☐264004
Managing Director: W.H. Atkinson
Technical Director: T.R. Baker
Marketing Director: M.J. Ebdon
Chief Sales Engineer: S. Scarisbrick
Services: Manufacturer of automatic flight control systems for helicopters. SAS, autopilots, flight directors and special flight patch controllers for search & rescue.

Lucas Aerospace
P.O. Box 867
Tustin, CA 92681-0867
☎714-832-6555 ☐7145568325
Aerospace Marketing: R. S. Villareal
Services: Marketing Office.

Lucas Aerospace Ltd.
Brueton House, New Road
Solihull
West Midlands, B91 3TX, England
☎021-704-5171 ☐335334
President: Dr. Alan K. Watkins
Vice President, Marketing: Roger G. Haggett
Public Relations: C.J. Wall
Marketing Services Manager: Angus MacLeod
Services: Design, development and manufacture of major electrical, electronic, hydraulic and pneumatic systems and equipment for all types of helicopters.

Lucas Industries, Inc./Lucas Aerospace
5215 N. O'Connor
Irving, TX 75039
☎214-869-0247 ☐732561
V.P., Aerospace Marketing: G. L. Schulstad
Services: Marketing headquarters. Aerospace systems and components for North America.

3M ® Stormscope Weather Mapping Systems
6530 Singletree Drive
Columbus, OH 43229
☎614-885-3310
Project Manager: W. P. Boland
Marketing Manager: J. Gregory Heaton
Sales Manager: David V. Heaton
Marketing/Communication Coordinator:
William C. Brodegard
Services: Exclusive manufacturer of a passive thunderstorm mapping instrument that operates out to more than 200 nautical miles on the ground or in the air. Airborne and ground models available.

M & N Plastics, Inc.
P.O. Box 434
Springtown, TX 76082
☎817-523-7245 ☐758516
President: Sammy B. Summers
Vice President: Mark Summers
Services: Manufacturer of helicopter replacement windows.

MBB - Helicopter & Transport Division
P.O. Box 801140
8000, Munich, West Germany
☎89-6000-2945 ☐5287710
President: K. Pfleiderer, Dipl.-Ing.
Vice President, Marketing: D. Halff, Dipl.-Ing.
Vice President, Engineering: V. Von Tein, Dipl.-Ing.
Vice President, Production: E. Hoegenauer, Dipl.-Ing.
Services: Helicopter manufacturer.

(51) **MBB Helicopter Corporation**
P.O. Box 2349
West Chester, PA 19380
☎215-431-4150 ☐173102
President & CEO: C.W. Moore
Vice President, Marketing: A. Aastad
Vice President, Marketing: S.E. Rocray
Vice Pres., Domestic Marketing: D.D. Groenemann
Advertising & Public Relations: Jim Metzer
Services: Manufacture, service and support of twin engine helicopter including the first commercial light twin in the world, the BO 105 Twin Jet, & the latest light/medium twin, the BK 117 Space Ship.

Marathon Flite-Tronics Company
2525 N. Naomi Street
Burbank, CA 91504
☎213-841-3210 ☐691487
Executive Vice President: Carl A. Grisier
Services: Manufacturer of FAA TSO'D AC static inverters & DC converters.

Marathon Oil Company
Aviation Division
Findlay, OH 45840
☎419-422-2121 ☐242446
President: W. E. Swales
Director of Operations: J. R. Neds
Chief Pilot: J. W. Maxie
Pilot/Helicopter Coordinator: H. R. Snoke
Services: Aviation division provides corporate personnel transport, and advisory service for units utilizing contract fixed wing and helicopter services.

The Marketing & Planning Group Inc.
999 N. Sepulveda Boulevard
Suite 314
El Segundo, CA 90245
☎213-640-2283
Managing Director: J.C. Greenway, III
Office Manager: Susan Westlake
Services: Market research, advertising, public relations and management consulting.

Maroc-Aviation
37, Boulevard de Montmorency
Paris, 75016, France
☎331-524-4321 ☐25797M
President: A. J. Spite
Vice President, Marketing: G.P. Marche
Services: Maintenance and overhaul equipment and blades for helicopters. Services to operators.

Ed Marshall Insurance, Ltd.
P.O. Box 610
Salem, VA 24153-0631
☎703-389-9383 ☐829472
President: Thomas Cook
Services: Aviation insurance agents.

Marsh & McLennan, Inc.
1221 Avenue of the Americas
New York, NY 10020
☎212-997-2000 ☐12474
Managing Director/Chairman
Aviation & Aerospace: Raymond C. Brooks
Vice President, Montreal Office: David Taylor
Services: Insurance Brokers.

(177) **The Marvel Manufacturing Co.**
204 Passaic Avenue
Fairfield, NJ 07006
☎201-227-6090
President, Washington, DC.: L.M. Bryron
Marketing/Sales: J.R. Fuller
Chief Engineer: R.E. Riddle
Services: Design & manufacture of precision horizontal suspension type static balance indicating equipment & application to helicopter rotors, aircraft propellers & other rotating parts for assembly balance & control of components part moment valves.

Masco Service Corporation
1200 N. Kimball Avenue
Southlake, TX 76092
☎817-481-8205 ☐586641
President: William C. Massey
Vice President: Ronald B. Massey
Services: Repair, overhaul, exchange, and sales of helicopter instruments.

Mata Helicopters Jerusalem
(IAI) Israel Aircraft Industries
P.O. Box 27-160
Jerusalem, 91271, Israel
☎(02)852293 ☐26213
President: Michael Zahavi
Vice President, Marketing: Martin Kiczales
Deputy General Manager: Samuel Arbel
Services: Overhaul, maintenance and repair of helicopters and components including electrical systems.

McAllister Engineering Enterprises
9739 S. 208th Street
Kent, WA 98031
☎206-852-0263 ☐294855UR
President: John McAllister
Secretary-Treasurer: Joyce M. McAllister
Services: Engineering and manufacture helicopter auxilary systems: weighing-longline, external lift, heater, forest fire suppressant, computer, shock absorber and static stoppers.

(52) **McDonnell Douglas Helicopter Company**
Centinela & Teale Streets
Culver City, CA 90230
☎213-305-5000 ☐182434
President: Jack G. Real
Vice President: R. Carlin
Vice President, Marketing: V.J. Varner
Director of Public Affairs: Robert W. Mack
Chief Engineer of Acoustics: Robert J. King
Manager Flight Operations: Roger H. Carlin
Services: Manufacturer of helicopters.

Measurement Systems International
12622 Interurban Avenue, South
Seattle, WA 98168
☎206-433-0199 ☐328005
President: David C. English
Vice President, Marketing: John A. Swartz
Advertising Manager: Terry L. Dazey
Services: Manufacturer of MSI-150 external cargo hook load monitoring systems. Instrument panel digital readout with optional printer/recorder.

Meridian Helifiight, Inc.
9703 Penn Road
Prince George, BC, V2N 2K8, Canada
☎604-561-1010 ☐0477188
General Manager: Bruce Ellwyn
Chief Inspector: W.G. Farquhar
Chief Engineer: Dave Heyer
Parts Manager: Harvey Clark
Services: Complete service, repair and overhaul for all commercial/military helicopter airframes, dynamic components & their related systems, parts support.

Micro-Surface Finishing Products, Inc.
P.O. Box 818
Wilton, IA 52778
☎319-732-3240 ☐9105251581
President: Herbert A. Wilson
Services: Manufacturer of abrasives.

Midland Ross Corporation
Grimes Division
550 Route 55
P.O. Box 247 Urbana, OH 43078
☎513-652-1431 ☐205439
General Manager: John Paxton
Director: R.M. Smith
Director of Engineering: Robert Hilgendorf
Manager, Engineering & Marketing: John Hartzler
Services: Manufacturers of interior/exterior aircraft lighting, NVG compatable IR, filtered & electroluminescent lighting; master caution systems & windshield wipers.

Miller Industrial Tools, Inc.
7111 Hayvenhurst Avenue
Van Nuys, CA 91406
☎818-767-2801 ☐696245
President: Leon I. Miller
Vice President/Secretary: Rosalind L. Miller
National Manager, Sales: Ken Perlis
Services: Tools for manufacturing & maintenance of aircraft, helicopter & spacecraft. Special tools manufactured to customer specifications.

Mira Slovak Aviation
P.O. Box 822
Santa Paula, CA 93060
☎805-525-2191 ☐662204
President: Mira Slovak
Field Representative: Arthur Rink
Services: Sale & distribution.

Mitsui & Co. (USA) Inc.
Suite 1212
433 Las Colinas Boulevard
Irving, TX 75039
☎214-556-1224 ☐791852
General Manager: S. Kumano
Assistant General Manager: Y. Ishii
Services: Export of helicopters and spare parts to Japan.

(75) **II Morrow, Inc.**
P.O. Box 13549
Salem, OR 97302
☎503-581-8101 ☐5105990110
President: Ray E. Morrow, Jr.
Vice President/Marketing: Michael G. Duff
Vice President: James Morrow
Technical Sales Manager: Sam Seery
Director of Engineering: Robert Bronson
Services: Repair Station.

Narco Avionics Inc.
270 Commerce Drive
Fort Washington, PA 19034
☎215-643-2900 ☐846395
President: Edward M. Zimmer, Jr.
Vice President, Marketing: J. Patrick Millard
Services: Avionics.

Nash Helicopter Associates Ltd.
York House, Clarendon Avenue
Leamington Spa
Warks, CV32 5PP, England
☎0926-32252 ☐312559
Managing Director: Martin Nash
Services: Sale, lease and purchase of all types of used helicopters.

Static Balance Equipment
For—Helicopter Rotors, Blades, Propellers, Spinners

EQUIP your shop and remote operations with an • Accurate • Versatile • Long Service Life • Readily Portable • Suspension Type Balance System

ACHIEVE balance before installation on aircraft.

GAIN • Balanced First Starts • Flight Ready Spares • Reduced Engine Starts/Time • Minimum Weather Exposure

ACCURATE The suspension balance principle, and manufacture to precision instrument standards combined with fully hardened and ground tool steels for critical parts insure initial and long lasting accuracy.

VERSATILE An inherent feature of this system. The balance sensing and indicating instrument (Arbor) is used with adapters, multipurpose wherever possible, to mount parts for balance. Helicopter make or model change, including future design, require new adapter design only when existing can not be applied.

LONG SERVICE LIFE Chrome plated surfaces, fully hardened parts, stainless steels and anodized high strength aluminum alloys insure long accurate service life and resistance to corrosion.

PORTABLE Equipment supplied as Kits include a fitted finished hardwood case for protection of all parts both in the shop and during transit.

SUSPENSION TYPE The suspension principle provides an immediate and absolute balance reference to gravity without need for leveling adjustments or rigid supports. Unbalance is detected as a tilt of the part instead of rotation, with the direction and amount of tilt indicating direction and amount of unbalance.

THE MARVEL MANUFACTURING CO
204 Passaic Avenue, Fairfield, NJ 07006
201-227-6090 USA

(92) **National Airmotive**
P.O. Box 6069
7200 Lockheed Street
Oakland, CA 94614
☎415-635-1500 ☐335346
President: A.E. Morijig
Vice President, Marketing: R.G. Foster
Manager, Allison 250 Sales: Dennis J. Faris
Services: Franchised distributor for Allison 250 series. Engine & spare parts sales, complete overhaul and repair, and capability and exchange program.

National Flight Nurses Association
c/o Air Medical Consulting Service
198022 Felcliff Lane
Huntington, CA 92646
☎213-426-0378
President: Roy Evans, R.N.
President-Elect: Bonnie Longino, R.N.
Chairman, Liaison Committee: Ford Keyes, R.N.
Treasurer: Susan Herron, R.N.
Secretary: Dana Burkan, R.N.
Services: Organization of professionals dedicated to the promotion of optimum patient care in air medical services. Membership is made up of registered nurses, paramedics, EMT's & other paramedical personnel actively involved in flight nursing.

(178) **Negretti Aviation, Inc.**
P.O. Box 999
Columbia, MD 21044
☎301-964-0977 ☐285830
Marketing Manager: Bob Brown
Director Sales/Marketing: Dennis Greengrass
Services: Engine equipment, avionics, sensors.

Nordam/Lori
510 S. Lansing Street
Tulsa, OK 74120
☎918-560-5654 ☐492377
President: Ray H. Siegfried, II
Vice President, Marketing: Charles B. Ryan
Manager Helicopter Marketing: Don C. Miller, Jr.
Services: Nordam - manufacture & remanufacture of all honeycomb parts. Lori - Manufacture & overhaul/repair of oil coolers.

Norsk-Lander, Inc.
P.O. Box 99599
Tacoma, WA 98499
☎206-535-3600 ☐295931
President: Bradford L. Schultz
Vice President: C.W. Schultz
Southwest Region: H.H. Reynolds
Offshore Sales: J. Hansen
Services: Design & manufacture of the Helidek, a prefabricated aluminum helicopter landing system for rooftop and off-shore installations.

(62) **Northern Airborne Technology**
1839 First Avenue
Prince George, BC, V2L 2Y8, Canada
☎604-562-2232 ☐0477132
President: Walter Shawlee
Vice President, Marketing: Dan Wheeler
Vice President Public Relations: Mark Phillips
Research & Development: Ken Veitch
Services: Manufacture of avionics radios and installation of avionics equipment.

Norton Performance Plastics-Composites Operations
355 N. Diamond Street
Ravenna, OH 44266
☎216-296-9948 ☐4338012
Business Manager-Composites Group:
Mark A. Dandurand
Business Manager-Aero Products: Ron Zimmerman
Sales Manager: Thomas N. Gibson
Sales Engineer: Alan Burky
Services: Specializes in design, manufacture and repair of radomes, and fabrication and repair of aircraft composite structures.

Nozaki and Company Ltd.
Aircraft Deptartment
16-19 Ginza 7-Chrome, Chuoku,
Tokyo, 104-91, Japan
☎03-542-9211 ☐J22375
Deputy General Manager: Kenichi Umeda
Services: Distributor.

O'Beirne, Nobert & Associates
311 Churchill Boulevard, Suite 200
Greenfield Park, PQ, J4V 2N1, Canada
☎514-671-1291 ☐05-25158
President: L.E. O'Beirne
Vice President: Gilles Nobert
Services: Aviation insurance adjustors and surveyors.

Ocean Air Insurors Ltd.
5000 Cedar Plaza Parkway
Saint Louis, MO 63128
☎314-849-6100 ☐755137
President: Rob Lawrence
Vice President, Public Relations: James B. Harper
Services: Specialist in worldwide helicopter and aircraft insurance. Brokers and consultants for safety and management programs.

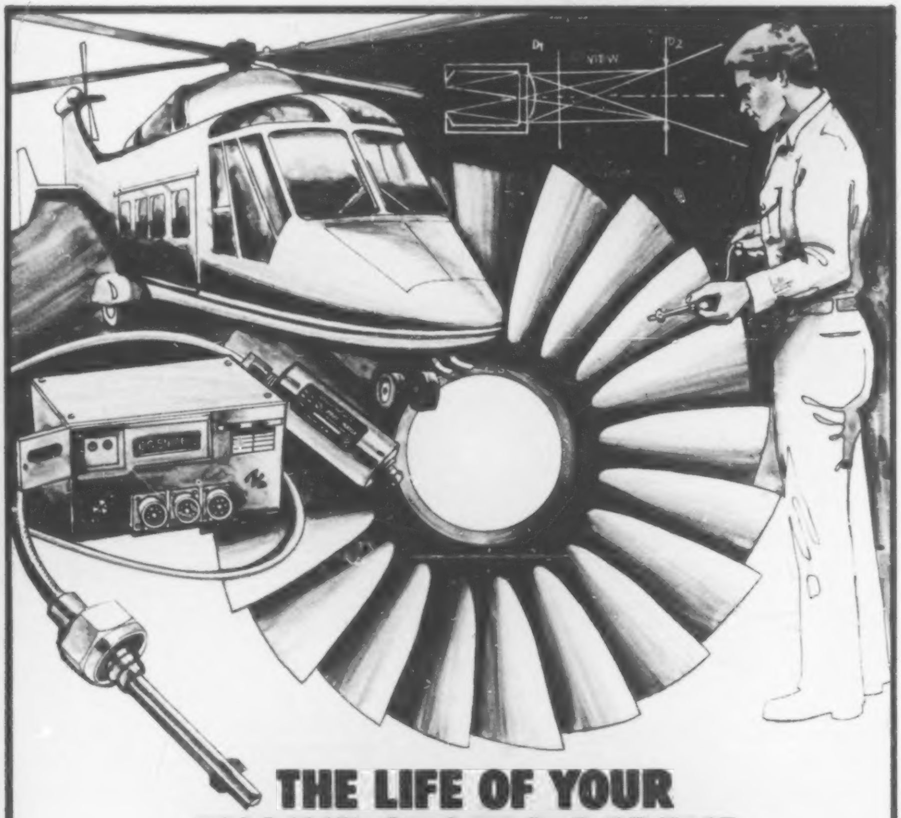
The Official Helicopter Blue Book
5225 Old Orchard Road, Suite 40
Skokie, IL 60077-9990
☎312-965-5755 ☐720493
President: Philip Sacks
Financial Vice President: Errol M. Friedman
G.M./Chief Appraiser: Barry D. Desfor
Circulation/Advertising Manager: Sharon Desfor
Services: Publisher of the "Official Helicopter Blue Book", helicopter appraisals, residual value reports, personal inspections and expert witness testimony.

Offshore Navigation, Inc.
P.O. Box 23504
New Orleans, LA 70183
☎504-733-6790 ☐RCA 200-435
President/CEO: George Roussel
Vice President, Marketing: A. William Marchal
Manager, Aviation Products: Kenneth B. Foret
Services: IFR Loran-C navigation products and digital data link/flight following equipment.

Oil Industry Services A.S
P.O. Box 46
N-4620, Vaagsbygd, Norway
☎042-86-100 ☐21062
Managing Director: B. Lislegard
Vice President, Marketing: M. Braithwaite
Services: Engineering, fabrication and hook-up for offshore oil/gas operators. Safedeck helidecks. Glare-free helilights.

Olympic Fastening Systems, Inc.
11445 S. Dolan Street
Downey, CA 90241
☎213-861-7251 ☐703624
General Manager: James K. Leeg
General Sales Manager: Larry J. Harden
Customer Service Supervisor: James K. Lawrence
Services: Manufacture aerospace fasteners and tooling systems.

Olympus Corporation of America
Industrial Fiberoptics Department
4 Nevada Drive
Lake Success, NY 11042-1179
☎516-488-3880 ☐960199
General Manager: Frank G. Becher
Services: Flexible and rigid fiberoptic borescopes, light sources and photographic accessories.



THE LIFE OF YOUR ENGINE SHOULD DEPEND ON NEGRETTI

With our precision Airborne Pyrometer design coupled with our Engine Monitoring System critical performance variances are easily targeted. Thermal blade condition and fatigue can be measured directly in addition to individual blade analysis. While the design features the latest in microprocessor electronics, the system contains highly sensitive infra-red optics necessary for sophisticated pyrometry. Together, you can depend on the Negretti Airborne Pyrometer and Engine Monitoring System to maximize the life of your turbine engine.
Call or write for more details.

SEE US AT BOOTH 1818
Negretti Aviation, Inc.

Box 999 Columbia, Maryland 21044 TEL:301-964-0977 TELEX: 285830

Orlando Blade Technologies Inc
Sanford Airport
Building 125 Sanford, FL 32771
☎305/321-3068 ☐564400
President: Ted W. Toms
Vice-President: Fred P. Clark
Secretary/Treasurer: Bradley G. Clark
Services: Rotor blade repair and overhaul.

(179) **P.E.D. - Pooleys**
45450 Industrial Place, Unit 4
Fremont, CA 94538
☎415-490-8695
President: James W. Osterman
Vice President, Marketing: Bill Osterman
Services: Portable fueling systems. Fuel handling & storage systems of any size. Individual fuel quality control systems. Portable and high speed refueling systems. Individualized fuel quality control systems.

PLM Transportation Equipment Corporation
45 N.E. Loop 410, Suite 840
San Antonio, TX 78216
☎512-340-5736 ☐763533
Chairman: Mark C. Hungerford
Vice President Transportation:
David E. Chandler
President: Allen V. Hirsch
Director, Marketing: Mark J. Anderson
Services: Equipment lessor.

PacAero
P.O. Box 3226
2810-20 N. Lima Street
Burbank, CA 91504-2597
☎818-841-7800 ☐677489
President: Charles R. Lovin
Vice President: J.M. Voelker
Services: Sales and service — electrical accessories — complete units and parts. Factory authorized distributor. Export facilities.

Pacer Systems
87 Second Avenue
Northwest Industrial Park
Burlington, MA 01803
☎617-272-5995
President: J.C. Rennie
Services: Engineering service — manufacturer of flight simulators, omni-directions, air data systems.

Pacific Airmotive Corp.
2940 North Hollywood Way
Burbank, CA 91503
☎213-842-5171 ☐677695
Vice President/General Manager:
Jerry D. Flanders
Vice President, Marketing: Barry C. Bangert
Customer Liaison: Jerry C. Carmody, Sr.
Services: P&WC turbine engines: overhaul and repair services. Spare parts and engine accessory support.

Patterson Enterprises Inc.
7049 Valjean Avenue
Van Nuys, CA 91406
☎213-781-1421
President: Thomas A. Patterson
Vice President, Marketing: Michael T. Patterson
Vice President, Public Relations: James R. White
Operations Manager: Diane L. Collins
Services: Helicopter accesories for movie productions such as props etc. (camera mounts).

Pedley Nets
P.O. Box 1
Glen Ellen, CA 95442
☎707/996-6629
Owner: Philip Pedley
Services: Net manufacture.

Penny & Giles Transducers Ltd.
Airfield Road
Christchurch
Dorset, BH23 3TH, England
☎0-202-476621 ☐41566
Managing Director: J.M. Dixon
Director of Marketing: G.R. Witt
Vice President, Manufacturing: V.P. Moores
Services: Design, development & manufacture of avionic, sensors and associated systems, analogue/digital air data systems & pitot-static equipment.

Penny & Giles Transducers Ltd.
1640 Fifth Street
Santa Monica, CA 90401
☎213-393-1497 ☐652337
President: C. Thomson
Services: Sales/marketing/product support/customer liaison/AOG/repair overhaul support.

(180) **Perkins Aerospace Products**
3724 N. Commerce
Fort Worth, TX 76106
☎817-625-4106 ☐758401
President/CEO: James A. Perkins
Vice President, Marketing: Dennis R. Henkell
Director, Public Relations: Al P. Pugh
Services: Manufacturers helicopter replacement windows, bubbles, and specialty design items.

Plessey Aerospace Ltd.
Abbey Works
Titchfield, Fareham
Hampshire, PO14 4QA, England
☎0329-43031 ☐86214
Managing Director: J. Varde
Marketing Director: W.D. Gilligan
Sales Executive (Aviation): S.E. Horn
Marketing Services & Planning: B.J. Bawtree
Market Development Manager: P.V. Cope
Services: Fuel pumping and fuel management systems, coolant pumps, actuators and remote power controllers for helicopters and fixed wing aircraft.

Plessey Aerospace
USA Marketing Office
511 E. John Carpenter Freeway
Suite 360, Los Colinas
Irving, TX 75062
☎214-556-0282 ☐758987
U.S. Representative: P.A. Lane
Services: USA marketing office for Plessey fuel systems, pumps and actuators.

Plessey Aerospace
USA Product Support
P.O. Box 667
Wellington, KS 67152
☎316-326-8219
General Manager: A. Jones
Services: USA product support for Plessey fuel systems, pumps and actuators.

⑥ **Pratt & Whitney Canada Inc.**
P.O. Box 10
㊷ Longueuil, PQ, J4K 4X9, Canada
☎514-677-9411 ☐05267509
Chairman/CEO: L.D. Caplan
V.P. Marketing/Sales: R.H. McLachlan V.P.
Public Relations: P. Henry
V.P. Marketing Admin./Support: J.N. Clark
Services: Designs, develops and manufacturers gas turbine engines for general aviation aircraft. Worldwide support for PT6, PT6T, PW100 and PW200.

Precision Forgings, Inc.
Valley Heat Treat Co.
600 St. Louis Avenue
Valley Park, MO 63088
☎314-222-5222 ☐910-760-1428
Chairman: Barry R. Todd
President: Louis E. Sell
Vice President, Finance: Joseph T. O'Connor
Chief Engineer: William J. Vinson
Services: Aluminum forgings.

Professional Helicopter Services Ltd.
209 Champlain Street
Timmons, ON, P4N 7L3, Canada
☎705-267-6585 ☐067-81627
President: Barry G. LeDuc
Services: Maintenance, management & consulting.

Professional Pilot Magazine
West Building
National Airport
Washington, DC 20001
☎703-684-8270
Publisher: Murray Smith
Executive Editor: Paul Proctor
Assistant to the Publisher: Bennett Omensky
Editor: Bill Garvey
Services: Publishing.

Publishers for Conventions, Inc.
1205 Main Street
Pittsburgh, PA 15215
☎412-781-0412
President: B.J. Gessler
Sales Supervisor: Howard L. Burrell
Services: The NATIONAL CONVENTIONEER, a free catalog of products and services relating to the helicopter industry.

YOUR DIRTY AND WET FUEL PROBLEMS

Call Pooley's—the fuel handling experts—for prompt help in any fueling situation

We can provide:

Positive shut-off monitor cartridges to assure that no water is loaded aboard the aircraft.

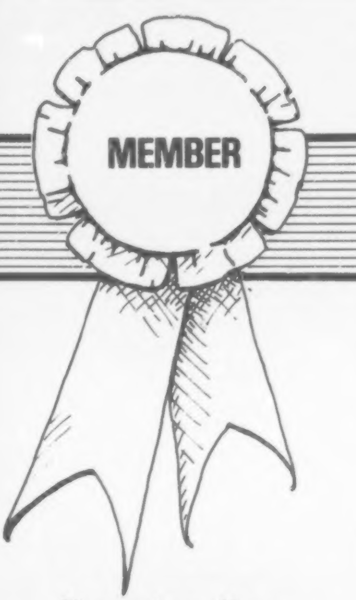
A full range of monitor housings to fit into your system.

Complete small fuel delivery systems for drum refueling.

A full range of both new and reconditioned filter and filter/separator housings and cartridges for large installations.

So—whether you need help with the system you have or design help on a new project from 50 to 50,000 gallons, call us.

Pooley's Fuel Filter Service, Inc.
A Division of Petroleum Equipment Distributors
45450 Industrial Place #4
Fremont, CA 94538
Call (415) 490-8695
(800) 322-3835



Be a leading exponent of the helicopter industry

...by becoming a member of HAI.

Even a modest increase in membership means an exponential increase in our ground effect.

The HAI enjoys a worldwide reputation as the focal point and principal forum of the civil helicopter industry.

And the direct benefits HAI offers its members provide an immediate return on the investment. Services and benefits run the gamut—from The Helicopter Annual to management and safety seminars designed specially for helicopter operators.

There are three membership categories: helicopter operators, associate members (suppliers to the industry) and sustaining members (individuals who wish to support the growth of the helicopter industry).

Joining will give you an excellent benefit package now, and will increase the magnitude of HAI's efforts on behalf of the entire industry.

For a free information package on HAI membership, return the postpaid card on page 80, or call the
Helicopter Association International,
1619 Duke Street
Alexandria, VA 22314-3406
Telephone: 703-683-4646
Telex: 89-615

Helicopter Association International

The Purdy Corporation
58 Hilliard Street
P.O. Box 1898
Manchester, CT 06040-1574
☎203-649-000 ☐7104274190
President: John M. Purdy, Jr.
Vice President/Sales: William E. Sullivan
Executive V.P.: George J. Purdy
V.P. Finance: Burton E. Swanson
Services: Manufacturing gearboxes, spindles, swashplates, hubs, cams, bulkheads, gears (spiral & bevel), splining bonding & plating.

Ramapo Helicopters, Inc.
Smith Road
Spring Valley, NY 10977
☎914-352-8600 ☐131528
President: Richard Eimert
V.P., Marketing/Sales: James V. Mitchell
Services: FAA, BHT, AHC repair station for maintenance, storage and major airframe repair.

Rediffusion Simulation Ltd.
Gatwick Road
Crawley
Sussex, RH10 2RL, England
☎0293-28811 ☐87661
Managing Director: D.A. Young
Marketing Director: M.G. Long
Manager, Public Relations: P. Spence
Marketing Manager, Helicopters: A.G.M. Longbottom
Services: Manufacturers of flight simulators, trainers, cockpit procedure trainers, computer based training systems & visual systems.

(96) **Reed Stenhouse, Inc.**
100 William Street
New York, NY 10038
☎212-806-6600 ☐961007
Senior Vice President: Joseph M. Rosenthal
Services: International insurance brokers.

Ro-Wing Aviation, Inc.
275 E. Pleasant Valley Road
Hangar 2
Camarillo, CA 93010
☎805-484-0556
President: Gary D. Foster
Chief Financial Officer: Roger M. Gagnon
Secretary: Maureen F. Foster
Services: Hughes 500 service center/FAA repair station.

(123) **Robinson Helicopter Company**
24747 Crenshaw Boulevard
Torrance, CA 90505
☎213-539-0508 ☐182554
President: Frank D. Robinson
Vice President: D. Edward Broman
Marketing Coordinator: Barbara Krauss
Services: Manufacturer of two-place piston-powered R22 helicopter.

(98) **Rollins Burdick Hunter**
P.O. Box 9210
Wichita, KS 67277
☎800-835-2677 ☐417407
President: Charles L. Jones
Executive Vice President: Lee R. Kiefer
Vice President: G. Garnett Tate
Vice President: Clinton C. White
Services: Multi-national insurance broker. Risk Management consultant.

Rolls-Royce Limited
Leavesden
Watford, WD2 7BZ., England
☎0923-674000 ☐23206
Project Director: Gordon F. Page
Public Relations Manager: Martin Brodie
Head of Engineering/Helicopter Engines: Hugh C. Hillier
Washington Representative: Rudy A. Schwarz
Services: Design, development and manufacturer of turboshaft engines between 800 shp and 2500 shp. Repair, overhauls and comprehensive product support.

Rotah Industries, Inc.
P.O. Box 4098
Bridgeport, CT 06607
☎203-576-6545 ☐964-227
President: H.F. Harrington, Jr.
General Manager: Ramiro Rocuant
Manager, Commercial Marketing:
Thomas W. Nokes
Services: Manufacturer of spare parts.

Rotor & Wing International
PJS Publications Inc.
P.O. Box 1790, News Plaza
Peoria, IL 61656
☎309-682-6626 ☐469661
Publisher: Jerry Constantino
Editor: Don Toler
Advertising Director: Terry Bredenberg
Assistant Advetising Director: Julia Stone
Washington Correspondent: L. Kim Smith
Services: Monthly trade magazine for the helicopter industry, includes annual Buyer's Guide as the 13th issue.

(181) **Rotor Blades, Inc.**
P.O. Box 589
Stockton, CA 95205-1477
☎209-466-0725 ☐5107655162
President: Philip A. Johnston
Controller: Dyanne L. Vargas
Services: Repair and/or overhaul of helicopter rotor blades.

Rotor-Flite, Inc.
8501 Telephone Road
Houston, TX 77061
☎713-641-0159
President: Robert D. Idema
Secretary/Treasurer: Chuck Emmett
Services: CRS 264-4 Aerospatiale service station A-Star, Twin Star.
(General maintenance/inspection station)

Russellstoll Division
Midland Ross Corporation
530 W. Mount Pleasant Avenue
Livingston, NJ 07039
☎201-992-8400 ☐13-8403
Senior Product Manager: Charles Trapani
Advertising Coordinator: Laurie Zelman Slack
Services: Manufacturer of heliport lighting.

S.F.I.M.
B.P. 74
Massy, 91301, France
☎920-88-90 ☐692164
President: J.L. Larpent
Director of Marketing: J.C. Parmentier
V.P. Public Relations: Mrs. Prein
Services: Automatic flight control systems - gyroscopes.

㊱ **SAFT America, Inc.**
711 Industrial Boulevard
P.O. Box 1886
Valdosta, GA 31603-1886
☎912-247-2331 ☐547620
President: Edward J. Mulvey
V.P., General Manager: Edward L. Nargi
Director, Corporate Advertising: Marsha Dukes
National Sales Manager: Charles E. Hopper
Services: Manufacturer and market aviation batteries. Product available through authorized dealers.

SEI Industries Ltd.
P.O. Box 35412
Station E
Vancouver, BC, V6M 4G5, Canada
☎604-270-6433 ☐04352848VCR
General Manager: Terry Ferguson
Director of Marketing/Research Development:
Don Arney
Sales Manager: Gilles Levesque
Services: Manufacture & sales of Bambi Bucket water bucket, Fuel-Easy flyable fuel container, Terra Tank ground storage bladders, Jet-Net marine rescue apparatus.

SFENA
B.P. 59
Velizy-Villacoublay, 78141, France
☎1-6302385 ☐260046F
President/CEO: Alain Guigue
General Manager: Michel Hucher
Director of Marketing: Roger Larrieu
Assistant General Manager: Jacques Teyssier
Services: Flight guidance systems.

SFENA Corporation
2617 Aviation Parkway
Grand Prairie, TX 75051
☎214-988-8000 ☐9108664655
President: W.M. Conlin
V.P., Business Development:
Stephen W. Williams
Customer Service Manager: Tom Healy
Marketing Svcs. Administrator: Lois Sonnier
Services: Manufacturer of helicopter flight control systems and guidance systems. Helicopter avionics/electronics systems; integration & engineering.

(182) **SL Auburn Spark Plug Co.**
89 York Street
Auburn, NY 13021
☎315-252-9501 ☐7108960138
President: Charles E. Riffle
Aviation Sales Manager: Edward J. Dyman
Engineering Manager: Stephen F. Smith
Services: Manufacturer of aviation spark plugs and igniters.

SOS Rescue & Survival Units
Ashlan & 99 Business Park
4111 N. Motel Drive, Suite 101
Fresno, CA 93711
☎209-275-3319
Owner: Gerald G. Nordstrom
Sales Agent: Ronald Nordstrom
Services: Distribution - compact, lightweight, multipurpose rescue & survival tools built to military specifications.

Satellite Technology Services Inc.
2310-12 Mill Park Drive
St. Louis, MO 63043
Director of Advertising: Brian J. Lorenz
Services: Manufacture and distribute handheld transceivers.

(54) **Schweizer Aircraft Corp.**
P.O. Box 147
Elmira, NY 14902
☎607-739-3821 ☐932459
President: W. Stuart Schweizer
Vice President Marketing: Paul H. Schweizer
Helicopter Marketing Director: Larry A. Brooks
Services: Manufacturer of the agricultural aircraft, the Ag-Cat, 300C helicopter and subcontract work for the aerospace industry.

Schwen Technology
3305 Vincent Drive
Pleasant Hill, CA 94523
☎415-935-1226
President: Janet Alvarez
Sales/Marketing Manager: Janice Schmidt
Services: Schwen Technology manufactures a stabilizing zoom lens compatible with most video cameras.

Scientific-Atlanta, Inc.
8835 Balboa Avenue
P.O. Box 23575
San Diego, CA 92123-0575
☎619-268-7210 ☐9103221733
Aviation Products Manager: Keith L. Jones
Government Products Manager: Thomas Winship
Services: Manufacturer of vibration test equipment, rotor blade track and balance equipment, and jet engine test cell instruments.

Semco Instruments, Inc.
11505 Vanowen Street
North Hollywood, CA 91605
☎818-942-1400 ☐9104992155
Marketing/Sales: S. Guy Moore
Services: Turbine engine temperature, speed, torque sensors & electronic control system design & manufacturer utilized in airborne & ground support applications.

Sensor Systems, Inc.
8929 Fullbright Avenue
Chatsworth, CA 91311
☎213-341-5366 ☐691583
Vice President: Si Robin
Services: Manufacturer of aircraft antennas.

Sermatech International Inc.
155 S. Limerick Road
Limerick, PA 19468
☎213-604-0018 ☐713718592
Vice President: Bob Krowka
Regional Manager: David Norfolk
Field Engineer: George Ottiniano
Manager: Kevin Kelly
Field Engineer: Jim Distafano
Services: Coating Service.

Shannon Financial Corporation
3451-B Vincent Drive
Pleasant Hill, CA 94523
☎415-932-5809
President: Michael T. McCune
Sales/Marketing Manager: James Phillips
Services: Used helicopter sales specializing in leasing and financial services for new and used aircraft and refurbishing contractor.

The Shephard Press Ltd.
111 High Street
Bucks, HSL1 7JZ, Burham, England
☎06286-4311 ☐846575
Managing Director: Alexander D. Shephard
Executive Editor: Paul Beaver
Managing Editor: Marilyn Bell
Advertising Director: Richard Koldeway
Services: Publishers of Helicopter World (civil edition) & Defense World (defence edition) quarterly magazines with annual buyer's guide directories.

(C4) **Sikorsky Aircraft**
N. Main Street
Stratford, CT 06602
☎203-386-4000 ☐7104531330
President: Robert Zincone
Executive Vice President: Eugene Buckley
Vice President, Commercial Marketing: Mackie D. Mott
Vice President, Worldwide Customer Service: Kenneth Mard
Director of Public Relations: Robert Stangarone
Services: Design, development, test and manufacture of commercial helicopters and support equipment.

Simmonds Precision Product Support Division
8075 N.W. 53 Street, Suite 100
Miami, FL 33166
☎305-593-1081 ☐807378
Vice President/General Manager: Duncun E. Bossle
Director, Customer Service: Dominic J. Scardino
Marketing Manager: William H. Thomas
Services: Repair and sales of Simmonds Products, flight and engine instruction, test equipment for helicopter industry.

Simplex Manufacturing Co.
13340 N.E. Whitaker Way
Portland, OR 97230
☎503-257-3511 ☐360936
President: Daniel Conti
Vice President: James D. Galligan
Sales Manager: Ken Glanz
Services: Manufacturer & sales rep. for aerial application equipment for helicopters for spraying, seeding, oil pollution control & fire fighting.

RBI

Rotor Blades Inc. Stockton, Calif.

FOR THE BEST IN MAIN AND TAIL ROTOR BLADE REPAIR

✓ BELL 47 204 205 206 212
✓ HUGHES 269 369
✓ HILLER 03 04
✓ ENSTROM

REPAIR STATION No. 464-38

1514 E. Scotts Ave. • Stockton, CA 95205 • Tel. 209-466-0725 • TWX 510-765-5162

AUBURN™
Auburn

For Power In A Pinch

Specify Auburn™ Igniters

The Auburn™ YB33-1 shown above is FAA- and OEM-approved for use on Allison 250 and Rolls-Royce Gem engines.

Unlike the competition's, our homogeneous semi-conductor extends igniter service life, endures higher burner temps.

Exclusive glass-sealing prevents separation of shell and insulator, transfers heat and eliminates leakage.

Our igniters are the most thoroughly tested in the business for zero-leakage. To keep you in business longer. From the leader in ceramic-to-metal technology since 1910. SL Auburn.

Auburn™ igniters take the load off your mind, get your load off the ground. On schedule.

The Spark Of Excellence Since 1910
SL AUBURN INC.
A Subsidiary of SL Industries, Inc.
89 York St., Auburn, NY 13021 • 315/252-9501

Sky Controls, Inc.
7518 Clybourn Avenue
Sun Valley, CA 91352
☎213-877-0341 ☐910-4982728
President: Jack Y. Holiday
Vice President, Marketing: Mark S. Holiday
General Manager: Doug Holiday
Secretary: Mercy E. Holiday
Services: Sale of new & overhauled aircraft accessory items. Limited sale of complete aircraft.

Sky Sign
P.O. Box 490068
Miami, FL 33149-0068
☎305-759-7446
President: Betty Foster
Vice President: C. Tom Foster
V.P. Public Relations: J. Scott
Services: Eletronic aerial & ground message systems (Goodyear Blimp type) day and night usable.

J.T. Slocomb Company
68 Matson Hill Road South
Glastonbury, CT 06073
☎203-633-9485 ☐710-424-8713
Vice President, Sales & Engineering: Robert Pastormerlo
Vice President, Financial: Gary Charland
Vice President, R & D: Barry Gregory
Director, Overhaul & Repair: Donald Keyser
Manager, Sales: Robert Cobb
Services: Engine component manufacturer.

Smiths Industries Aerospace & Defense Systems, Inc.
P.O. Box 275
18 Great Valley Parkway
Malvern, PA 19355
☎215-296-5000 ☐5106685025
President & CEO: Geoffrey S.M. Hedrick
Vice President, Marketing: William N. Brooks
Vice President, Finance: Ronald C. Albrecht
Marketing, Harowe Division: Robert C. Bessette
Marketing, Clearwater Division: C.G. Gunderson
Services: Manufacture air data computers, performance computer systems, primary flight instrumentation, fuel gauging, engine instruments & electronic clocks.

Soloy Conversions, Ltd.
450 Pat Kennedy Way, S.W.
Olympia Way, WA 98502
☎206-754-7000 ☐5107850241
President: Joe I. Soloy
Marketing Group Manager: Randy Furtick
International Sales Manager: Tim Koester
Domestic Sales Manager: Nick Parkinson
Services: Turbine conversion packages for Bell 47 series, Hiller 12E series helicopters, Cessna 206, 207, 185, 210, and various other fixed wing products, along with a portable heliport.

Sony Trading Corporation
10-18 Takanawa, 4-chome
Minato-Ku, Tokyo, 108, Japan
☎03-448-3136 ☐2424328
President/CEO: Tetsuro Yotsumoto
Managing Director: Matsuji Kato
Services: Aerospatiale's helicopter sales agent and distributor in Japan.

Southeastern Aviation Underwriters, Inc.
P.O. Box 20439
Atlanta, GA 30325
☎404-351-8303 ☐542550
President/CEO: John A. Myers
Vice Chairman: William W. Brown
Senior Vice President: Robert M. Glinane
Vice President: W. Floyd Garner
Services: Aviation physical damage and liability insurance.

⑰ **Southern Air Transport, Inc.**
P.O. Box 52-4093
Miami, FL 33152
☎305-871-5171 ☐518856
Chairman: James Bastian
President: William Langton
Senior Vice President, Sales: F.A. Zuzolo
Services: Aviation transport services.

Southern Marine & Aviation Underwriters, Inc.
610 Poydras Street
New Orleans, LA 70130
☎504-524-4131 ☐58-7440
President: Doyle P. Spell
Vice President: Stephen P. Dinsdale
Services: Provide helicopter insurance for all classes of helicopters operated by U.S. corporations.

Spar Aerospace Limited
825 Caledonia Road
Toronto, ON, M6B 3X8, Canada
☎416-781-1571 ☐065-24240
General Manager: Gordon Epp
Director, Operations: Arthur Munroe
Manager, International Sales: Wayne Bell
Manager, International Sales: George Naida
Services: Repair and overhaul of electrical and mechanical components and accessories for fixed and rotary wing aircraft.

Spectrolab, Inc.
12500 Gladstone Avenue
Sylmar, CA 91342
☎213-365-4611 ☐9104961750
President/CEO: Lawrence M. Spicer
Vice President, Marketing: Bryan P. Roland
Product Line Manager: Robert Chandler
Marketing Administrator: Sylvia Brennan
Services: Helicopter accessories and searchlight equipment.

Sperry Corporation
Aerospace & Marine Group
P.O. Box 21111
Phoenix, AZ 85036
☎602-869-2311 ☐668419
Director of Communications: Eldon Kramer
Services: Sales & service of flight control systems and airborne weather radar.

Standard Aero Ltd.
33 Allen Dyne Road
Winnipeg International Airport
Winnipeg, MB, R2R 0S8, Canada
☎204-775-9711 ☐0757878
Executive V.P. & CEO: Doug M. Finley
Vice President, Marketing: R.A. Carter
Director of Sales: A.C. Daily
Services: Overhaul of helicopter engines and accessories. Distribution of helicopter parts and products. Branches in U.S., Canada, and Europe.

Standard Helicopter Corp.
1828 N.E. Siskiyou
Portland, OR 97212
☎503-284-4667
President: Greg Nutt
Vice President: Doris Nutt
Services: Helicopter management/consultant. Parts manufacturing/accessories.

Stewart Smith/
Stewart Wrightson Organization
125 S. Wacker Drive,
Suite 2500
Chicago, IL 60606
☎312-236-7333 ☐206154
Assistant Vice President: John R. Howard
Services: Insurance.

Summit Design & Marketing Inc.
Annapolis City Marina,
Suite 315
P.O. Box 4815
Annapolis, MD 21403
☎301-268-1882
President: William H. Clark
Services: Summit services include conceptual planning, design and production of marketing programs. Corporate identity & sales presentations.

Swedlow, Inc.
12122 Western Avenue
Garden Grove, CA 92645
☎714-893-7531 ☐678457
Corporate V.P., Technology: William F. Fischer
Vice President, Marketing: Ronald C. Moyer
Vice President, Engineering: Gene Nixon
Sales Manager: Victor Brand
Services: Tranparent materials & fabricated windshields & canopies; opaque reinforced structural & armor parts & materials.

Switlik Parachute Company, Inc.
1325 E. State Street
Trenton, NJ 08607
☎609-587-[illegible]00 ☐843421
President: Richard Switlik, Sr.
Vice President: Richard Switlik
Sales: Kathleen Holland
Services: Manufacturer of airline safety equipment.

Symbolic Displays, Inc..
P.O. Box 19626
Irvine, CA 92713
☎714-546-0601 ☐9105951756
President/CEO: Nancy D. Wood
Vice President: Guy E. Morris
Marketing Administrator: Kitty Wantje
Services: Manufacturer of lighting systems, computer fuel management systems, display panels, avionic accessories and lighted keyboards.

Synergetics, Inc.
13611 Heartside Place
Dallas, TX 75234
☎214-241-2891
President: Richard C. Serkland
Vice President: Steven S. Cone
Services: Manufacture executive boarding aids (retractable steps) and other accessories.

Systron-Donner
Safety Systems Division
935 Detroit Avenue
Concord, CA 94518
☎415-671-6698 ☐337611
General Manager: Joseph G. Wolfslau
Marketing Manager: Shay T. Pickton
Engineering Manager: Kevin A. Faughnan
Chief Applications Engineer: Rocky R. Aicale
Services: Manufacturer of aircraft and industrial fire and overheat detection equipment.

TA Manufacturing Co.
375 W. Arden Avenue
Glendale, CA 91203
☎818-240-4600 ☐910-497-2065
President: Gene L. Green
Vice President: Robert Byerly
Marketing & Sales Director: Charles Laudan
Services: Manufacturer of clamping devices and line support systems.

TOTAL Compagnie Francais
204 Rond-Point du Pont Sevres
92515 Boulogne Billancourt
Cedex, France
☎16206843 ☐201456 F
Air Logistics Engineer: J. Baldus
Services: Exploration · production · crude oil.

TRW Aircraft Components
Power Accessories Division
23555 Euclid Avenue
Cleveland, OH 44117
☎216-692-5965
Vice President/Div. Manager: R.T. Craig
Manager, Aircraft Accessories: R.L. Schroeder
Requirements Manager: P.D. Totedo
Senior Sales Engineer: James B. Nolish
Services: Design, manufacture assembly & test of aircraft & engine fuel pumps & accessories; propulsion assemblies for underwater weapons systems; & electromechanical assemblies for nuclear power generation.

Taylor Aircraft Sales, Inc.
P.O. Box 1391
Cushing, OK 74023
☎918-225-5071
President: Oscar Taylor
Vice President: Scott Syler
Services: Manufacture "Helicart" ground handling equipment for most popular helicopters. Available as manual or self-propelled.

Tech Tool Plastics, Inc.
7800 Skyline Park Drive
Fort Worth, TX 76108
☎817-246-4694 ☐758635
President: John E. Wilson
Services: Helicopter window and bubble manufacturing.

Technical Development Co.
(TEDECO)
24 E. Glenolden Avenue
Glenolden, PA 19036-2198
☎215-583-9400 ☐831429
President: Thomas Tauber
V.P., Sales & Marketing: Harry M. Belman
Vice Pres., Public Relations: Brian Collins
Sales Manager, Aerospace: Robert F. Fenlon
Services: The largest manufacturer of on-aircraft oil debris monitoring devices in the world. Also, aircraft fluid system accessories & products for the industrial and military/mobile market.

Teledyne Avionics
P.O. Box 6400
Charlottesville, VA 22906
☎804-973-3311
President: Herbert M. Barnard
Director of Marketing: Donald E. Lange
Director of Public Relations: F. Richard Lentzsch
Manager, Turbine Engine Products: Dale J. Thompson
Marketing Representative: Joyce DeWitt
Services: Products manufactured: IVSI, turbine power analyzer and recorder, and angle-of-attack systems.

Teledyne Battery Products
P.O. Box 431
840 W. Brockton Avenue
Redlands, CA 92374
☎714-793-3131 ☐676438
President: Lee Wenzel
Vice President, Marketing: Lee Greisch
Manager, OEM Sales: Dick Ruff
Services: Manufacturers of the "GILL" lead acid aircraft battery line.

Teledyne Neosho
P.O. Box 648
Neosho, MO 64850
☎417-451-1810 ☐9107704963
President: Wayne D. Ortloff
Executive Vice President: M.A. Barbettini
Public Relations: G.D. Wilson
Services: Major overhauler of turbo prop and jet aircraft engines and a manufacturer of aircraft precision gears for the aircraft industry.

Teledyne Systems Company
19601 Nordhoff Street
Northridge, CA 91324
☎213-886-2211 ☐9104931249
President/CEO: Harry Halamandaris
Vice President, Marketing: Virgil Romiti
Public Relations: Jan Thomis
Loran Program Manager: Jerry Hillard
Services: Avionics.

Terra Corporation
3520 Pan American Freeway, N.E.
Albuquerque, NM 87107
☎505-884-2321
President: Richard W. Donovan
Vice President, Marketing: Morris Venezia
Services: Manufacturer of avionics

Texaco, Inc.
Aviation Transport Division
177 Industrial Avenue
Teterboro, NJ 07608
☎201-288-1894
Manager: Les B. Gerlach
Head Pilot: R.J. Lampton
Services: Other base address: P.O. Box 5096 Houma, LA 70360.

Texas Apparel, Inc.
P.O. Box 7568
Amarillo, TX 79114
☎806-359-0331
President: Sharon Nix
Services: Manufacturer of flight suits and uniforms.

Texas Instruments
Navigation Systems
P.O. Box 405; Mail Stop 3438
Lewisville, TX 75067
☎214-462-5220 ☐73324
Marketing Manager: Gary C. Howe
Consumer Services: Henry M. Meltzer
Advertising: Dianne Manning
Service Manager: Buddy Meek
Services: Manufacturer of avionics.

Texstar Plastics Company
P.O. Box 534036
Grand Prairie, TX 75053
☎214-647-1366 ☐0732397
President/CEO: Earl I. Jones
Vice President, Marketing: T.W. Weatherred
V.P. Operations: James V. Irion
V.P.-Controller: E. A. Wolcott
Services: Custom plastics fabricator; manufacturer of transparencies, ducting and interior parts for aircraft.

Tiodize Co., Inc.
15071 Industry Lane
Huntington Beach, CA 92649
☎714-898-4377
President: Thomas R. Adams
Services: High-tech lubricants, corrosion coatings, graphite composites, teflon impregnation of hard anodize; titanium anodizing using the tiodize process AMS °2488 & coatings.

1986
MEDIA KIT
available on request
HELICOPTER
THE INDUSTRY'S LEADING COMMERCIAL & DEFENCE NEWS JOURNAL

- The *original* international helicopter news magazine — now in its 10th year of publication.
- Exclusive commercial and military coverage — with regional reports from local correspondents worldwide.
- Produced by helicopter professionals for helicopter professionals — giving quality editorial and unmatched credibility.
- Airmailed direct to every commercial and military operator in 162 countries — plus other international industry and key aviation subscribers.
- Special distribution at all major events in the helicopter calendar.
- The most cost-effective advertising in the helicopter market — less than half the price of other journals.

For information on advertising contact Linda L. Cook or Alice Percy at the address below.
Airmailed Subscription Rate:
$25.00 p.a. (£8.50 Europe). Payable by VISA/MASTERCARD with full name/address/position details. Published bi-monthly. Not available on a free circulation basis.

HELICOPTER International

75 Elm Tree Road, Locking, Weston-super-Mare, Avon,
England BS24 8EL
Telephone: 0934-822524. Telex: 44220 COMTEL G

Tracor Aviation, Inc.
495 S. Fairview Avenue
Goleta, CA 93117
☎805-967-4571 ☐9103341176
President/CEO: Earl H. Richmond
V.P. Marketing/Sales: Jack S. Meade
Program Manager: Sam Hewitt
Advertising: Judith Salig
Services: Completions and modifications, avionics repair and installation, custom paint, interior retrofits, engineering and certification. EMS/conversion for Hughes 500/530 helicopters.

Transaero, Inc.
80 Crossways Park Drive
Woodbury, NY 11797
☎516-921-7400 ☐96-7734
Director of Marketing: Valdis Skilins
President: Shell B. Youngwall
Executive Vice President: Anthony Caputo
Vice President, Sales: David R. Mazoff
Vice President, Administration: Charles Kane
Services: Aircraft spares, components and systems.

Transamerica Airlines
P.O. Box 2504
Airport Station
Oakland, CA 94614
☎415-577-6200 ☐336320
Director, Cargo Sales: Barry S. Freeman
Cargo Sales Manager: Jack R. Owens
Services: Air Cargo Charter/Airline.

Transupport, Inc.
265 Soundview Avenue
Shelton, CT 06484
☎203-735-0333
President/CEO: Harold Foote
Services: T-53/T-55 engine spares. Also, T-53/T-55 special tools.

Trilectron Industries, Inc.
300 Ninth Avenue
Hawthorne, NJ 07506
☎201-423-4005 ☐710-995-4414
President/CEO: Sigmund Borax
Marketing Manager: Elissa L. Soyka
Services: Manufacturer of ground support equipment-both DC & 400HZ; electrically operated, engine driven, and self propelled. Tugs and combination tug/gpu's.

Tronair, Inc.
S. 1740 Eber Road
Holland, OH 43528
☎419-866-6301 ☐8104402839
General Manager: Wayne A. Geraci
Marketing/Sales: Ron W. Dossat
Engineering: Paul Borton
Controller: Nino Carrollo
Services: Manufacture and distribute ground power equipment, hydraulic service equipment, hydraulic jacks, engine stands, towbars, workstands and other ground support equipment.

Tug-A-Lug, Inc.
41614 102nd Street East
Lancaster, CA 93534
☎805-944-1910
President: Donald A. Harman
Services: Manufacture helicopter and small aircraft ground handling equipment.

Turbine Casing
2800 Avenue E East
Arlington, TX 76011
☎817-860-9022 ☐758672
Sales Manager: Bob Landon
Services: An authorized repair facility for Allison 250 turbine components.

Turbo West, Inc.
Jefferson County Airport
Broomfield, CO 80020
☎303-469-6671 ☐454564
President: Chris Finnoff
Vice President: Bruce Chiddister
Vice President, Service: Douglas Stimpson
Helicopter Division Manager: Michael Cochran
Services: Factory approved service center for Bell 206 series.

(105) **Turbomeca**
Bordes
64320, Bizanos, France
☎59-328437 ☐560928
Chairman: Joseph Szydlowski
Vice President: Gerard Pertica
Assistant General Manager: Marcel Tavernier
Commercial Manager: Pierre Vauterin
Services: Design, manufacturer, sale and product support of turboshaft engines for helicopters.

USAIG (United States Aircraft Insurance Group)
One Seaport Plaza
199 Water Street
New York, NY 10038
☎212-952-0100 ☐129206
President/CEO: John V. Brennan
Vice President, Marketing: Richard R. McGreal
Senior Vice President: George W. Meehan
Services: Aviation insurance.

Union Carbide Coatings Service
P.O. Box 24901
Indianapolis, IN 46224
☎317-299-1935 ☐276401
Manager, Market Development: G.J. Pappaionou
Sales Promotion Manager: David O. Armstrong
Sales Manager, Dallas: W.B. Campbell
Services: Supplier of wear resistant metal and ceramic coatings.

United Industries, Inc.
Travelite Division
1200 Belle Avenue
Winter Springs, FL 32708
☎305-699-9152
Sales Representative: Dave Wilson
Sales Representative: Pam Patrick
Convention Coordinator: Donna Albershardt
Services: Importers of premium items (custom case design).

Universal Navigation Corp.
3545 W. Lomita Boulevard
Unit F
Torrance, CA 90505
☎213-325-4081 ☐705806
President: Hubert L. Naimer
Executive Vice President: Charles H. Edmondson
Vice President of Engineering: Charles A. Pullen
Director: Karl Frudenfeld
Manager, Technical Support: John Tymczyszyn
Services: Avionics manufacturing.

University of Southern California
ISSM - Extension & In-Service Programs
University Park, MC 0021
Los Angeles, CA 90089-0021
☎213-743-6523 ☐181101
Associate Executive Director: Richard K. Brown
Professor, Aviation Safety: Richard Wood
Administrator/Registrar/ISSM: Deborah Wilson
Services: Aviation safety courses for the international community in several multi disciplinary areas: Technology, Human Factors, Safety Program Management, Health, Environment communications & investigation.

Uscan Aviation Sales Limited
Rural Route 4
Alliston, ON, L0M 1A0, Canada
☎705-435-4031
President: Douglas V. Beamish
Services: Component & spare parts repair & overhaul, airframe repairs, Bell 47, 206, 212 service facility.

Utah Research
& Development Co. Inc.
7915 South 1530 West
West Jordan, UT 84084
☎801-561-9385 ☐9109255123
President: William A. Boyd
Executive Vice President: Lowell K. Brown
Executive Vice President: Glenn N. Waterman
Marketing Engineer: F. Herman Shipman
Services: Manufacturer of airborne battery chargers and AC-DC converters.

Vac-Aero International, Inc.
1371 Speers Road
Oakville, ON, L6L 2X5, Canada
☎416/827-4171 ☐06982313
President: R.E. Pritchard
Vice President: J.H. Hooper
Metallurgical Engineer: J. Pritchard
Sales Manager: Alan Jephcott
Services: Repair and overhaul turbine engine components.

Van Dusen Air, Inc.
2626 E. 82nd Street
Minneapolis, MN 55420
☎612-854-8776 ☐29-0506
President/CEO: Eugene A. DePalma
Vice President, Marketing: A.A. Coletto, Jr.
Exec. Vice President/COO: J. H. Middleton
Services: Worldwide aircraft parts distributor; engine overhaul, FBO and fueling services.

Velcon Filters, Inc.
1750 Rogers Avenue
San Jose, CA 95112
☎408-298-6525 ☐346482
President: L. W. Taylor
Vice President Marketing/Sales: Richard Taylor
Marketing Sales Manager: Marla Siegel
Aviation Product Manager: Rick Waite
Services: Filtration products for aviation fuel cleanliness.

Vertical Aeronautics International
14423 Sylvan Street
Van Nuys, CA 91401
☎818-901-1434
President: Lee Ambers
Vice President: Robert Edholm
Services: Site selection, design & governmental intercourse of private & public use heliports including supply of heliport accessories.

Stephen L. Way International
280 Corporate Center
5 Becker Farm Road
Roseland, NJ 07068
President: John C. Eshbaugh, Jr.
Vice President: John T. Matthews
Services: Aviation insurance.

Weco Inc., Aerospace Systems
4206 W. Burbank Boulevard
P.O. Box 6547
Burbank, CA 91505
☎213-845-8711 ☐69 8522
Board Chairman/CEO: Hal Weygandt
President: Bill Weygandt
V.P., Marketing Manager: Ted Eversole
Marketing Account Manager: George Bartek
Services: Electrical and electronic accessories. Sales, overhaul, exchange and parts. Distributor for Leland Electrosystems.

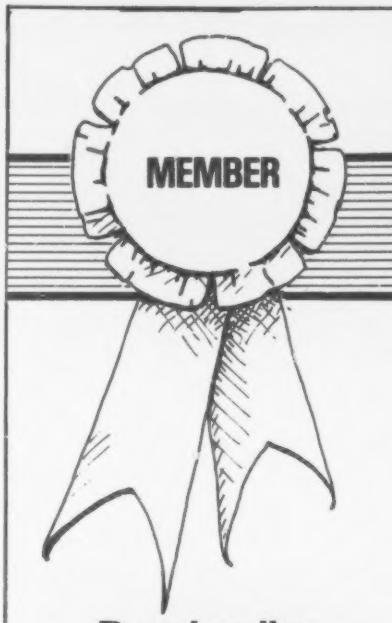
Western Aircraft Maintenance, Inc,
Morrison-Knudsen Co., Inc.
4444 Aeronca Street
Boise, ID 83705-5090
☎208-386-6565 ☐368439
President/CEO: J.J. Olsen
Helicopter Department Manager: Ralph Chadburn
Vice President, Marketing: Allen G. Hoyt
Services: Engine repair/overhaul specialists: Aerospatiale - Aloutte, Lama, AStar, Twin Star, Gazelle, Bell 206; Allison 250 series II engines; warranty; part sales.

(57) **Westland Helicopters Limited**
Yeovil
Somerset, BA20 2YB, England
☎0935-75222 ☐46277
Divisional Director: T.P. Brennan
General Sales Manager: Malcolm Reid
Publicity Manager: John Snelling
Area Sales Manager: Ian Axton-Graeves
Services: Helicopter design and manufacture. Helicopter product support.

Westland Incorporated
1735 Jefferson Davis Highway
Suite 805
Arlington, VA 22202
☎703-486-8000
President: Robert H. Gladwell
Manager, Operational Development: Dr. J. Leverton
Services: Helicopter sales and support.

Wulfsberg Electronics, Inc.
11300 W. 89th Street
Overland Park, KS 66214
☎913-492-3000 ☐424242
President/CEO: Glenn M. Bergmann
Vice President of Sales: H. Jack Hanslip
Services: Manufacturer of airborne radio telephones, VHF AM, VHF & UHF FM communications and VHF AM base stations.

Yehnert Helicopter Inc.
1049 Airport Drive
Upland, CA 91786
☎714-985-3618
President: B.E. Yehnert
Secretary-Treasurer: Arlene M. Hartman
Services: Helicopter repair and modification.



Be a leading exponent of the helicopter industry

...by becoming a member of HAI.

Even a modest increase in membership means an exponential increase in our ground effect.

The HAI enjoys a worldwide reputation as the focal point and principal forum of the civil helicopter industry.

And the direct benefits HAI offers its members provide an immediate return on the investment. Services and benefits run the gamut—from The Helicopter Annual to management and safety seminars designed specially for helicopter operators.

There are three membership categories: helicopter operators, associate members (suppliers to the industry) and sustaining members (individuals who wish to support the growth of the helicopter industry).

Joining will give you an excellent benefit package now, and will increase the magnitude of HAI's efforts on behalf of the entire industry.

For a free information package on HAI membership, return the postpaid card on page 80, or call the
Helicopter Association International,
1619 Duke Street
Alexandria, VA 22314-3406
Telephone: 703-683-4646
Telex: 89-615

Helicopter
Association
International

Directory of HAI sustaining members

Adams, Richard J.
2326 South Congress
Suite 2A
West Palm Beach, FL 33406
☎305-622-6180

Alex, Ralph P.
1037 Stratfield Road
Fairfield, CT 06432
☎203-333-1166

Alvarez, Al
P.O. Box 1197
Safford, AZ 85548
☎602-428-7896

Amedei, Giampaolo
Via F. Balducci Pegolotti
11-13
Firenze, 50127, Italy
☎410826

Anderson, Homer C.
2170 Alice Avenue, No. 3
Oxon Hill, MD 20745
☎301-630-5817

Andrew, Richard G.
40 Kemble Street
Lenox, MA 01240
☎413-637-1434

Andrews, Frank
CC 907; P.O. Box 167
Jeddah, Saudi Arabia

Armstrong, J.G. (Jack)
2101 Plaza de La Candela
Las Vegas, NV 89102
☎702-873-1157 ☐653500

Armstrong, Roscoe C.
2712 Burnwood Court
Arlington, TX 76016
☎817-457-8706

Aviation Safety Engineering
ASE/T Transport Canada
Tower C, Place de Ville
Ottawa, ON, K1A 0N8, Canada

Aviation Safety Promotion ASPT
Transport Canada
Tower C, Place de Ville
Ottawa, ON, K1A 0N8, Canada

Axelrod, Peter
934 San Miguel Road
Concord, CA 94518
☎415-676-8652

Bailey, James A., Jr.
7338 Cornelia Drive
Minneapolis, MN 55435
☎612-835-6917

Baird, Robert L.
142 Wing Foot Drive
Springfield, IL 62704
☎312-998-9086

Baker, Frank J., M.D.
360 E. Randolph
Chicago, IL 60601
☎312-856-0922

Baldwin, Thomas
Cambridge Arms, Apartment 501
202 S.E. First Street
Evansville, IN 47713
☎812-423-8844

Ballauer, Alb C.
403 Morris Lane
Wallingford, PA 19086
☎215-872-2140

Baratti, Victor A.
6838 Battle Creek Road, S.E.
Salem, OR 97301
☎503-363-9210

Barrett, Michael L.
1100 Ohio Drive, S.W.
Washington, DC 20242
☎202-426-6968

Barten, Simon
1120 Place Santerre
Brossard, PQ, J4X 1X5, Canada
☎514-671-6338

Baxt, William D., M.D.
4932 Sun Valley Road
Del Mar, CA 92014
☎619-775-3130

Beck, James
73450 No. 92 Country Club Drive
Palm Desert, CA 92260
☎619-346-3915

Beckner, Peter E.
3401 Korovin Bay Circle
Anchorage, AK 99515
☎907-349-1700

Beintema, Keith D.
P.O. Box 69
Leighton, IA 50143
☎515-626-3771

Biddle, Timothy M., Esq.
1100 Connecticut Avenue, N.W.
Washington, DC 20036
☎202/452-5853

Blakely, Robert W.
17 Colonial Drive
Newnan, GA 30263
☎404-253-2152

Blechinberg, Thomas F.C.
Apartado 51731
Caracas, 1050A, Venezuela
☎927660 ☐23437

Bohlinger, Richard
15005 Bringard
Detroit, MI 48205
☎313-526-1896

Bolton, William B.
109 E. 81st Street
New York, NY 10028
☎212-288-5853

Booss, Edward F.
8653 Mockingbird Lane
Cincinnati, OH 45231
☎513-521-8656

Bot, Bertinus Johannes Maria
116 Colony Drive
Enterprise, AL 36330
☎205-347-3541

Bowen, Robert A., III
P.O. Box 4611
Macon, GA 31208
☎912-741-9443

Boyd, James A.
Rural Route 1
P.O. Box 121
Corbiel, ON, P0H 1K0, Canada
☎705-752-3800

Bradley, Roger D.
1114 Olde Oaks Road, No. 208
Schaumburg, IL 60195
☎312-397-8686

Braue, George C.
2031 Riva Ridge
San Antonio, TX 78248
☎512-492-1683

Breunig, Robert A.
7462 Ridgeline Court West
Mobile, AL 36609
☎205-633-0833

Brodie, Samuel E.
5712 Acapulco Drive
Fort Worth, TX 76118
☎817-485-6855

Bucci, Michael
258 S. River Road
Bedford, NH 03102
☎603-668-6080

Buckwater, Len
P.O. Box 5100
Westport, CT 06880
☎203-227-0348

Bukhary, Mohammed, N.A., Capt.
CC904; P.O. Box 167
Jeddah, Saudi Arabia
☎02-6871902 ☐401007SJ

Burke, Clint
E. 541 Meyer Lake Drive
Shelton, WA 98584
☎206-426-8444

Buschkotter, Dayle A.
137 27th Street
Apartment D
Hermosa Beach, CA 90254
☎213-318-2879

Calman, Kathryn S.
1901 S.W. 87th Avenue
North Lauderdale, FL 33068
☎305-722-3019

Calman, Kenneth J.
1901 S.W. 87th Avenue
North Lauderdale, FL 33068
☎305-722-3019

Carter, Robert G.
76 Village Loop Road
Pomona, CA 91766
☎714-622-2281

Cholle, Pierre
4 Avenue de La Grange
Saint Maur, 94100, France
☎1-283-4187

Collett, Howard M.
53 West 1800 South
Orem, UT 84058
☎801-226-3303

Collier, Ken
19021 ½ Gault Street
Reseda, CA 91335
☎818-343-9008

Commandant (G-EAE/TP62)
U.S. Coast Guard
2100 Second Street, S.W.
Washington, DC 20593
☎202-426-0796

Coombe, Richard H.
9626 Prelude Court
Vienna, VA 22180
☎703-938-2648

Coombs, Bruce A.
Route 1, Box 1055
Yakima, WA 98901
☎509-453-7683

Coombs, Max
17921 N.W. 85th Avenue
Miami, FL 33015
☎305-822-1627

Cooper, Philip G.
P.O. Box 546
347 11th Street
Montara, CA 94037
☎415-728-7180 ☐3718699

Correia, Ivan S.
Av. Presidente Kennedy 6000/702
Joboatao
54000 Prenambuco, Brazil
☎081-361-0686 ☐081-4277

Cortino, James M.
1146 S. Wenonah
Oak Park, IL 60304
☎312-383-3269

Cost, Garrett A.
103 Manasass Loop
Victoria, TX 78415
☎512-576-3023

Coughlin, John A.
92-1041 Makakilo Drive
Apartment 80
Ewa Beach, HI 96707
☎808-524-7727

Countouris, Dimitri
Souidias & Gennadiou No. 20
Athens, Greece
☎7235896 ☐216272

Coutu, Pierre
P.O. Box 5909
St. John's, NF, A1C 2B2, Canada
☎709-753-4195 ☐30292031010

Crouse, James Teague
Argyle Street
Lake Peekskill, NY 10537
☎914-528-2233

Cummings, Larry F.
P.O. Box 612
Crawfordsville, IN 47933
☎317-362-40[illegible]4

Cunningham, Hal
P.O. Box 280
Chinese Camp, CA 95309
☎209-532-6355

Dart, Donald L.
3100 Sheldon Jackson Drive
Anchorage, AK 99508
☎907-333-7827

David, Charles E., Jr.
1001 W. Charles Street
Hammond, LA 70401
☎504-345-3619

Deaton, Steven G.
5814 S.W. Multnomah Boulevard
Portland, OR 97219
☎503-246-4129

Deiker, Robert F.
1304 E. Northshore Drive
Tempe, AZ 85283
☎602-273-9798

DerHohannesian, Armen
RFD 4
Colonial Way
Exeter, NH 03833
☎603-382-8049

DiPietro, Richard P.
53 Tardie Terrace
East Bridgewater, MA 02333
☎617-378-3898

Drnovsek, Fedor
1200 Travis
Houston, TX 77002
☎713-651-1700

Dumont, Theodore E.
1101 Naugatuck Avenue
Milford, CT 06460
☎203-878-1943

Dunn, Kenneth A.
P.O. Box 22243
Fort Lauderdale, FL 33335
☎305-565-0672

Dust, Dieter W., Capt.
Heinrich-Schuette-Str. 24
D-2942, Jever, West Germany
☎04461-4751

Dye, Roy
3943 Seawind Court
Memphis, TN 38115
☎901-362-9924

Ellertson, Fred H.
2356 W. 45th Avenue
Vancouver, BC, V6M 2J6, Canada
☎604-263-8803

Elebash, Karl S., III
1406 Adam Court
Jacksonville, NC 28540
☎919-451-6158

Ellies, Dave
4460 Langport Road
Columbus, OH 43220
☎614-451-4558

Enriques, R.M.
5704-288 Baltimore Drive
La Mesa, CA 92041
☎619/464-2408

Evans, Jeff C.
2116 North Freeman
Santa Ana, CA 92706
☎714-542-8560

Evans, Raymond E.
Route 1
P.O. Box 123B
Schell City, MO 64783
☎417-432-3318

Fairbanks, Charles D. (Don)
4888 Beechwood Road
Cincinnati, OH 45244
☎513-831-7220

Fairbanks, Nancy M. (Pat)
4888 Beechwood Road
Cincinnati, OH 45244
☎513-831-7220

Farlow, David K.
601 Highway 61 N. Bypass
No. 6-D
Vicksburg, MS 39180-6550
☎601-636-3132

Feldman, Arlene B.
P.O. Box 468
Cherry Hill, NJ 08003
☎609-292-3020

Fergione, Michael C.
447 30 ½ Road, NBU 2
Grand Junction, CO 81504
☎303-434-4411

Field, Eddy D., II
1401 Moncado Drive
Glendale, CA 91207
☎818-244-9190

Finn, Terry
P.O. Box 189
San Carlos, CA 94070-0189
☎415-592-9707

Flanagan, William J.
508 Leona Drive
Ann Arbor, MI 48103
☎313-663-9770

Fornoff, A.L.
D-503
900 Calle de Los Amigos
Santa Barbara, CA 93105

Freitas, Elzo Luiz Padilha
Rua Americo de Oliveira, 375/71
Itajuba, 37.5000, Brazil
☎035-622-0340 ☐312602

Fugate, Robert C.
1904 Sequoia
Fort Collins, CO 80525
☎303-482-9874

Fuller, LeRoy A.
3038 Driftwood Court
Fort Mitchell, KY 41017
☎606-341-6477

Gamble, C. Don
P.O. Box 356
Barrow, AK 99723-0356
☎907-852-2424 ☐090-26-566

Gavran, Michael C.
17935 Renwick Road
Azusa, CA 91702
☎818-969-2024

George, Eli N.
15-G South Street
W. Brattleboro, VT 05301
☎802-254-5907

Gibbs, David Jonathon
28 Key West
Broadbeach Waters
Queensland, 4218, Australia
☎075-345-791

Gibson, Edward G., M.D.
36 Moccasin Lane
Rolling Hills Estates, CA 90274
☎213-378-5676

Gillett, John
6342 E. LeMarche Avenue
Scottsdale, AZ 85254
☎602-951-4213

Gilman, James I., M.D.
535 Dahlia Street
Denver, CO 80220
☎303-320-6965

Glasscock, Michael E., M.D.
1811 State Street
Nashville, TN 37203
☎615-327-3040

Goetz, T. Tracey, Capt.
10729 Holloway Drive
Upper Marlboro, MD 20772

Golfos, James L.
22061 Jonesport Lane
Huntington Beach, CA 92646
☎714-964-7043

Gordon, Spencer B.
1201 Brickell Avenue
Suite 613
Miami, FL 33131
☎305-373-6340

Green, Mitchell
7201 Soundview Drive
Gig Harbor, WA 98335
☎206-851-9296

Greenhalgh, Edward A.
191 Kingsway Avenue
Winnipeg, MB, R3M 0G4, Canada
☎204-475-3116

Greenwald, Jerry
400 Main Street
Stamford, CT 06901
☎203-325-2647

Griscom, Thomas W.
387 Melrose Avenue
San Francisco, CA 94127
☎415-334-6144

Gustafson, E. E. (Tug)
32 Rocky Ridge Drive
Trumbull, CT 06611
☎203-377-2045

Haddas, William
12261 Laing
Detroit, MI 48224
☎313-527-8844

Hahn, James M.
1219 Bushkill Center Road
Nazareth, PA 18064
☎215-759-2090

Hanley, William H.
P.O. Box 589
Sewickley, PA 15143
☎412-741-6757

Hannah, David, III
2028 Buffalo Terrace
Houston, TX 77019
☎713-621-5934

Hart, Eldon C.
151 N. First East
Rexburg, ID 83440
☎208-356-3309

Hartmann, Luc
☎3-3580 Sefton
Port Coquitlan, BC, V3B 3R2, Canada
☎604-941-8791

Hasson, Gary L.
633 N.W. 120th Street
Seattle, WA 98177
☎206-367-4225

Hateley, James W.
16080 E. Milan Drive
Aurora, CO 80013
☎303-693-3894

Heckler, R.B.
102 Trinidad Drive
Tiburon, CA 94920
☎714-854-8844

Hegidio, Joe
P.O. Box 2942
Alameda, CA 94501
☎415/523-6677

Henderson, James R.
4175 Shattuck Road
Garden Prairie, IL 61038
☎815-547-8230

Hermes, Harold
6904 Edgewater Drive
Oklahoma City, OK 73116
☎405-842-7121

Hirae, Clement
P.O. Box 12625
Overland Park, KS 66212
☎913-341-8160

Hoover, James M., Capt.
9723 79th Street, S.W.
Takoma, WA 98498
☎713-898-0188

Houston, Lee
2611 W. 100th Street
Anchorage, AK 99503
☎907-344-6376

Howell, Ernie L.
200 Northside Drive
Enterprise, AL 36330
☎205-347-7237

Hynes, Kevin P.
100 Helicopter Drive
Frederick, OK 73542
☎405-335-5754

James, George
P.O. Box 790424
Dallas, TX 75379
☎214-380-1369

Jensen, Louis
P.O. Box 7854
Longview, TX 75607
☎206-254-6692

Jensen, Peter S.
P.O. Box 1521
Arlington, VA 22210
☎703-524-1415

Jeppesen, Richard F.
24211 S. Alma School Road
Chandler, AZ 85224
☎602-895-1892

Jarawski, Edward A.
32556 Mound Road
Warren, MI 48092
☎313-264-7438

Johnson, G.H. (Gus)
P.O. Box 3665
Ventura, CA 93006
☎805-647-1951

Johnson, Lawrence H.A.
12498 Hedges Run Drive
Woodridge, VA 22192
☎503-665-7547

Johnson, Raymond E.
732 Albion Street
San Diego, CA 92106
☎619-224-4510

Jones, David G., Jr.
P.O. Box 9883
Aspen, CO 81612-9883
☎303-925-9390

Juric, Mary M., R.N.
4200 N. Marine
Chicago, IL 60613
☎312-975-5828

Kauffman-Cox, Amy Lynn
12601 Franklin Farm Road
Herndon, VA 22071
☎703-620-4852

Kearney, Frank G.
1508 Wright Street
Arlington, TX 76012
☎817-275-1421

Kehoe, Frank
7N574 Garden Avenue
Roselle, IL 60172
☎312-893-5797

Kelley, James E.
5550 N. Ocean Boulevard
Apartment 10-A
Riviera Beach, FL 33404
☎305-844-5814

Kelly, Donald E.
23 Cobblers' Lane
Ridgefield, CT 06877
☎203-438-8413

Kerfoot, Lester R., Jr.
6216 Apache Street
Springfield, VA 22150
☎703-971-5297

Kitay, Deanna S., Ph.D.
3126 Beluche Drive
Galveston, TX 77550
☎409-744-4741 ☐792333

Klingenhagan, John L.
4209 Haston Court
Alexandria, VA 22311
☎703-379-2653

Knox, Mitchell
315 W. Walton
Chicago, IL 60610
☎312-943-5564

Kost, James F.
RD1 Box 4470
Basin, WY 82410
☎307-568-2413

LaSalle, Todd P.
P.O. Box 55
Perry, LA 70575

LaVassar, Leonard J.
121 Chandler Drive
West Chester, PA 19380
☎215-696-3594

Lafferty, Ronald T.
Route 2
Box 465A
New Brockton, AL 36351
☎205-894-6351

Laino, Robert
1 Felms Court
Bethpage, NY 11714
☎516-433-7376

Lariviere, Jean-S
13 Chaussee de la muette
Paris, 75016, France

Lasser, Dave
502-1218 Burnaby Street
Vancouver, BC, V6E 1P5, Canada
☎604-681-8907

Lavinio, Stephen J.
79 Hamilton Street
Madison, NJ 07940
☎201-377-7996 ☐136424

Leister, Glenn A.
8314 Epinard Court
Annandale, VA 22003
☎703-425-6290

Lewis, Harold Steven, Jr.
Route 6, Box 227B
Jacksonville, NC 28540
☎913-347-6378

Lewis, Frank
1011 Texas Trail
Roanoke, TX 76262
☎817-379-5869

Mack, Dennis B.
424 N. Aberdeen Court
Lakeland, FL 33803
☎813-644-7848

Malrey, Ed
1322 Cardeza Street
Philadelphia, PA 19119
☎215-548-3293

Manoogian, Berge B.
1957 Woodside Drive
Dearborn, MI 48124
☎313-336-5177

Maresh, Doug
10815 Russell Avenue
Bloomington, MN 55431
☎612-884-9392

Mashman, Joseph
3310 Fairmont
Dallas, TX 75201
☎214-521-0579

McCarthy, Robert J.
833 Rancho Way
Petaluma, CA 94952
☎707-778-0631

McComsey, Michael
356 N. Primrose Avenue
Monrovia, CA 91016
☎818-359-4277

McCurdy, Gary R., Capt.
1719 Cambria Drive
East Lansing, MI 48823
☎517-351-3198

McDannell, Dennis P.
3531 Oakland Road, N.E.
Cedar Rapids, IA 52402
☎319-395-7054

McDonnell, Edward H., Capt.
CC907
P.O. Box 167
Jeddah, Saudi Arabia
☎02-682-0030

McGuire, Frank G.
1495 Newton Street, N.W.
Apartment 201
Washington, DC 20010
☎202-332-5575 ☐46-7931

McHugh, Peter C.
3918 Terrace Drive
Annandale, VA 22003
☎703-642-5546

McKay, Mrs. Herbert G. (Nancy Lee)
3410 Almeria
Tampa, FL 33629-5220
☎813-251-5663

McKenna, Michael D.
3070 Westman Court
Bloomfield Hills, MI 48013
☎313-540-0633

McMahon, James G. (Jim)
General Delivery
Cumberland Beach, ON, L0K 1G0, Canada
☎705-689-5580

McMahon, John P., Col. USMC
5123 New Ranch Road
El Cajon, CA 92020
☎619-444-1977

McMillan, Margaret
111 Leonie Street
Lafayette, LA 70506
☎318-981-3340

Meehan, John E.
Teterboro Airport
Teterboro, NJ 07608
☎201-288-5218

Millar, Ted L.
5858 S.W. Riverridge Lane
Apartment 35
Portland, OR 97201
☎503-223-4267

Miller, Charles H.
1725 Honore Avenue
Sarasota, FL 33582
☎813-371-0165

Miller, Harold M.
2126 Dewyse Road
Bay City, MI 48708
☎517-892-8398

Mish, David R.
913 Elizabeth Street
Bakersfield, CA 93308
☎805-399-9391

Morden, Gregory
7335 Mariner Way, Apt. 109
Indianapolis, IN 46224
☎317-293-3596

Morrissey, William H.
30 Burchard Lane
Rowayton, CT 06583
☎203-866-1226

Mowbray, Norman R.
Route 1
Box 57
Bryantown, MD 20617
☎301-932-1577

Nagel, Steven P.
1725 Jefferson Davis Highway
Suite 801
Arlington, VA 22202
☎703-920-1062 ☐64342

Nay, David R.
8714 Kenilworth Drive
Springfield, VA 22151
☎703-425-9858

Nelson, Ralph F.
421 Aviation Way
Frederick, MD 21701
☎301-340-2457

New, Harold D. (Don)
P.O. Box 455
McMinnville, OR 97128
☎503-472-1234

Newman, Mark W.
6130 Carlisle Court
New Orleans, LA 70114
☎504-394-3635

Northrup, G. W.
P.O. Box 574
Route 219
Ellicottville, NY 14731
☎716-699-4635

Norwood, James J.
4427 E. Aire Libre Avenue
Phoenix, AZ 85032

O'Grady, Russell, III
1202 Acton Court
Duncanville, TX 75137
☎214-298-2994

Okita, Richard Y.
385 Kuliouou Road
Honolulu, HI 96821
☎808-396-0269

Olson, Glenn A.
21 14 Nishi Azaby, 3 Chome
Minato Ku, Japan

Oney, Tony
2631 W. 100th Avenue
Anchorage, AK 99515
☎907-344-4971

Oswald, Peter C.
1 Granada
Briarcrest
Hershey, PA 17033
☎717-533-2775

Outlaw, Bert
1651 Shimmering Pine
Milton, FL 32570
☎904-994-5396

Papadakos, Peter J.
Saint James
Long Island, NY 11780
☎516-584-5404

Parent, Randy
17930 Lake Chabot Road
Castro Valley, CA 94546
☎415-785-3370

Parrott, Robert C.
P.O. Box 133
Scio, OR 97374
☎503-394-3670

Penkhus, Robert A.
1101 Motor City Drive
Colorado Springs, CO 80906
☎303-473-4595

Perera, John H.T.
P.O. Box 20476
Manama, Bahrain
☎232308 ☐9289

Perry, Guy P., Jr.
R.F.D. 8; Box 461A
Loudon, NH 03301
☎603-783-4259

Pessin, Ben
P.O. Box 57
Rialto, CA 92376
☎714-885-1128

Peters, Richard A.
Apartment F
130 Greenfield Avenue
Ottawa, ON, K15 5L2, Canada
☎613-235-8435

Philpott, Robert W.
Rural Route 1, P.O. Box 303
45 Oak Ridge Road
Bethel, CT 06801
☎203-744-7496

Pogue, L. Welch
Metropolitan Square
655 Fifteenth Street, N.W.
Washington, DC 20005-570

Pojanowski, Ray L.
1685 W. McComb Avenue
Porterville, CA 93257
☎209-782-0694

Poulton, Thomas Jon, M.D.
6620 Underwood Avenue
Omaha, NE 68132
☎402-551-0809

Pretextat-Lecomte, Claude
14 Calle 5-09, Apt. 12
Guatemala, Zona 10, Guatemala
☎502-2 313285

Price, R. Allen
3680 Skyline View Drive
Reno, NV 89509
☎702-322-2325

Prior, Jack B.
Greater Buffalo Int'l Airport
Buffalo, NY 14225
☎716-633-1000 ☐919117

Randall, Richard S.
9042 E. Wagon Wheel Way
Parker, CO 80134
☎303-841-2934

Redditt, Hugh J.
21 Street Road
Newtown Square, PA 19073
☎215-647-0860 ☐353450

Reid, John
2601 Mount Brook Drive
Mobile, AL 36609
☎205-666-3761

Reindl, Sergio Rodriquez
Gelati 101-601 B
Col. Sn. Miguel Chapultepec
Mexico, D.F., 11850, Mexico
☎905-277-8604 ☐383-177-3659

Resnick, Bruce K.
P.O. Box 17073
Milwaukee, WI 53217-0073
☎414-964-4444

Rhoades, James C.
6124 Sherry Lane
Box 375 A
Dallas, TX 75225
☎214-691-6431

Richardson, Donald W.
2544E S. Walter Reed Drive
Arlington, VA 22206
☎703-931-464

Richer, Eugene G.
P.O. Box 1435
Monterey
Nuevo Leon, Mexico
☎83-464500 ☐382890

Roberts, Bruce B.
7625 Kimcoe Way
Indianapolis, IN 46254
☎317-241-5793 ☐2676400

Roberts, Gerald M.
Tai Ping Towers, 267
582- Soi Ekamai
Bangkok, 10110, Thailand
☎390-0061

Robinson, Carl S.
C Company
8th CAB
APO New York, NY 09185
☎06131-37415

Rogers, Charles, E.
205 Independence Avenue
Unit 217
Quincy, MA 02169
☎617-471-1479

Rossomme, Carl G.
9465 Basswood Drive
Olmsted Falls, OH 44138
☎216-235-9175

Rossomme, Gary E.
4007 Buckinghan Court
Dumfries, VA 22026
☎703-670-0614

Roubin, A.S.
8340 Greensboro Drive
McLean, VA 22102
☎703-442-0480

Ruggenberg, Myles
16443 North 32nd Way
Phoenix, AZ 85032
☎602-992-0873

Rutledge, Garry R.
300 Mile Road
Suite C32
Etobicoke, ON, Canada
☎416-621-4647 ☐06961482

Saada, Shadid M.
1528 Excelsior Avenue
Oakland, CA 94602
☎415-531-3373

Sawh, Narenda
Wight's Lane, Kingston
Georgetown, Guyana
☎029-701

Schneider, Joseph S.
90 Ellery Street
Cambridge, MA 02138
☎617-492-7657

Schroder, Frederick C.
3315 Norton Drive
Fort Worth, TX 76118
☎817-284-8169

Schurr, Robert J.
1426B Werner Park
Fort Campbell, KY 42223-5000
☎615-431-5245

Schusheim, Sol M.
185 Woodmere Boulevard
Woodmere, NY 11598
☎516-586-3311

Shelton, Jack
1907 Avalon Lane
Arlington, TX 76014
☎817-265-0386

Sheridan, Dean C.
4520 Wicklow Place
Apartment 101
Virginia Beach, VA 23452
☎804-499-9890

Shouldis, Charles E.
Box 83
White River, SD 57579
☎605-259-3647

Sibley, C. Terry, Jr.
P.O. Box 126
Greensburg, LA 70441
☎504-222-4403

Slattery, John M.
P.O. Box 18029
Oxon Hill, MD 20745
☎301-567-4407

Smith, J. Michael
P.O. Box 42
Kingsburg, CA 93631
☎209-897-4952

Smith, James E.
9606 Chelmsford Drive
San Antonio, TX 78239
☎512-653-1570

Smith, Jeffery M.
6500 W. Charleston,
Apt. 209
Las Vegas, NV 89102
☎702-870-6107

Smith, Peter M.
One Legal Eagle Way
Morrison, CO 80465
☎303-697-9269

Sonnenfeld, Elio Moti
Rua Peixoto Gomide, 1554-40
Sao Paulo, 01409, Brazil
☎011-282-0831

Spencer, Charles E.
P.O. Box 185
Fort Campbell, KY 42223
☎203-658-2349

Spicer, Kerby M.,Jr.
1230 Toro Canyon Road
Santa Barbara, CA 93108
☎805-969-6642

Stegemiller, Kenneth
7837 Briardale Terrace
Rockville, MD 20855
☎301-840-1351

Stegich, Stephen R.
1251 Avenue of the Americas
New York, NY 10020
☎212-757-6870 ☐224556

Stein, Joseph A.
70796 Barlow Trail
Zig Zag, OR 97049
☎503-622-3425

Stitzle, Fletcher Stoney
P.O. Box 366
Keller, TX 76248
☎817-431-1220

Stock, Michael J.
8406 Timber Lane
Lafayette, IN 47905
☎317-564-4601

Stoneking, Donald B.
35 Lenape Trail
Washington, NJ 07882
☎201-689-7347

Strickland, Dan
11685 McCarty Road
Carmel Valley, CA 93940
☎408-659-3627

Stuelpnagel, Thomas R.
1682 Rico Place
Palos Verdes Estates, CA 90274
☎213-373-2872

Sumarlidason, Arni L.
P.O. Box 1380
Grand Cayman Island, West Indies
☎809-949-4217

Sutjongdro, William
P.O. Box 8781
Riverside, CA 92515
☎213/422-4924

Taliaferro, Stephen G.
5757 S. Staples Street
Apartment 810
Corpus Christi, TX 78413
☎512-993-8718

Thompson, John L. (Jack)
10702 Rippon Lodge Drive
Fairfax, VA 22032
☎703/352-8226

Thompson, Wayne L.
Box 296
Route 1
Fincastle, VA 24066
☎703-254-2637

Thornton, Dan
P.O. Box 337
Eagle Lake, TX 77434
☎713-234-5551

Toomath, Ernest H.
Suite 444
100 Richmond Street, West
Toronto, ON, M5H 3K6, Canada
☎416-869-0900 ☐6523442

Turco, Michael Landis
105 Friar Drive
Clarksville, TN 37042

Turner, Jay C.
4215 N. 100th Street
Apartment 348
Milwaukee, WI 53222
☎414-463-6322

Turner, Stuart W.
11752 Arrow Point Drive, N.E.
Bainbridge Island, WA 98110
☎206-842-6742

Tuttle, Joel N.
1804 Spring Court
Cheyenne, WY 82003
☎303-466-9615

Urban, Dudley W.
222 N. Singingwood Road
Apartment 6
Orange, CA 92669
☎714-551-7236

Uttal, Robert R.
P.O. Box 7058A
Orlando, FL 32854
☎305-425-4200

Vickers, Tirey K.
1906 Wooded Court
Adelphi, MD 20783-1343
☎301-439-7737

Vida, Thomas L.
515 Laurier Drive
Windsor, ON, N9J 1M3, Canada
☎519-734-1082

Vos, Patricia Mary
P.O. Box 46
Keg River, AB, T0H 2G0, Canada
☎403-981-2251

Walls, Edward L., Dr.
3501 Seward Place
Charlotte, NC 28211
☎704-364-1127

Ward, John F.
107 Goldsborough Street
Easton, MD 21601
☎301/820-7524

Weeks, Charles B.
1706 Guardian Road
32 Oi Kwan Road
Wanchai, Hong Kong
☎5-737287 ☐64778

Wellby, Peter Thomas
16 Hyde Park Gate
Seletar Airbase
Singapore, 2879, Singapore

White, Ray A.
625 Toxaway Drive
West Palm Beach, FL 33413
☎305-471-1320

Williams, Tracy
3004 Silverton Drive
Dallas, TX 75229
☎214-484-1614

Wittstadt, Thomas
Dieninckstrasse 19
4400, Muenster, West Germany
☎02506-411

Woods, Frederic J.
1130 Torry Place
Anaheim, CA 92806
☎714-533-0895

Wright, A.W. "Jack"
4956 N.W. 31st Terrace
Oklahoma City, OK 73122
☎405-946-2432

Zakarija, Ika
1104 S. College Street
Number 24
Lafayette, LA 70503
☎318-237-0862

Zambrano, Guillermo R., M.D.
P.O. Box 666
Prince Frederick, MD 20678
☎301-535-4115

Ziegler, Hannes
Alte Landstrasse 106
Zollikon
Zurich, 8702, Switzerland
☎19152504 ☐55197

Ziegler, James Craig
Petty Road, Rural Delivery 2
Cranbury, NJ 08512
☎609-655-8415

Zuzolo, F.A. "Zeke"
4207 Meadowbank Drive
Seabrook, TX 77586
☎713-474-4213

Student members

Bagdon, Albert B.
528 E. Bailey Road, Apt. 203
Naperville, IL 60565
☎312-369-9239

Campbell, J.J.
690 McClay Road
Novato, CA94947
☎415-897-5406

Duffy, Barry J.
9308 S. Hamilton
Chicago, IL 60620
☎312-445-5524

Erdle, Martin Andrew
21930 New Hampshire Avenue
Brookville, MD 20833
☎301-774-6583

Hart, James H.
P.O. Box 1118
1201 E. 32nd Street
Hays, KS 67601
☎913-625-4871

Huff, Carl
4222 Justice Street
Garland, TX 75040
☎214-934-3631

Phelps, Debbie
200 Cool Meadows Drive
Ballwin, MO 63011
☎314-394-0200

Trainor, Martin
Box 876
Station A
Toronto, ON, M5W 1G3, Canada
☎416-597-1288

Worth, John H.
727 Worth Lane
Scotts Valley, CA 95066
☎408-438-2698

FLY NEIGHBORLY
HELICOPTER ASSOCIATION INTERNATIONAL
FLY NEIGHBORLY GUIDE

Be good to your neighbor

The Fly Neighborly Guide is available free to HAI members. The guide is the only digest of its kind and covers all aspects of the noise problem . . . from recommended operative practices to procedures for developing a good community relations program.

Order your copy today. Call or write:
Helicopter Association International
16[illegible] Duke Street
Alexandria, VA 22314-3406
Telephone: 703-683-4646. Telex: 89-615
Or return the information reply card on page 144.

Be good to your neighbor.

Helicopter Association International

Year in Review

HAI's 1985 activities continued at a high level throughout the entire year. The high point was the acceptance and occupation of the Association's newly-purchased office at 1619 Duke Street, Alexandria, VA. After 37 years of paying rent, HAI is now the proud owner of an all-new, brick office building located in one of the most preferred areas in all of Metropolitan Washington, D.C. Some other highlights of the year:

1/17/85 The 37th Annual Meeting & Industry Exposition opened in New Orleans, Louisiana, and the *1985 Helicopter Annual* was officially released. HAI's was the first trade show in the new New Orleans Trade Center.

1/85 Significant by-law changes were approved at the Annual Meeting. These included: clarification of regular membership requirements; designation of the Chairman as CEO; changing the title of the Executive Director to President; increasing the number of officers; and eliminating the vote of the manufacturers representatives on the Board of Directors.

1/85 Three new members were elected to the HAI Board of Directors: Ms. Wanda L. Rogers, Rogers Helicopters; Mr. Vernon E. Albert, Petroleum Helicopters, Inc.; and Mr. Charles Andrus, Exxon Co.

2/85 President Frank L. Jensen, Jr. attended a briefing at the White House on international policy matters, which was introduced by Vice President George Bush.

2/85 HAI's Director of Heliports and Airways, Glenn Leister, hosted an organizational meeting of Mid-Atlantic Helicopter Association.

3/85 HAI received a telex from Mr. Arthur H. Wagner, Vice President of Operations at Aerospatiale and co-chairman of HAI's Manufacturers Committee, giving service life extension for Alouette III and Lama main rotor blades from 3,000 to 4,500 hours. This 50% extension of blade life will save operators hundreds of thousands of dollars.

3/20–21/85 The HAI Executive Committee met in Washington, D.C. to decide on preliminary budget proposals for fiscal year 1985-86.

3/20/85 The Executive Committee met with FAA Administrator Donald D. Engen.

3/21/85 The Executive Committee met with Congressman Norman Y. Mineta, Chairman of the House Subcommittee on Aviation, and HAI's 1986 Annual Meeting keynote speaker.

4/85 HAI's General Counsel, Steffanie D. Parker, presented a legal brief in Philadelphia, PA. On behalf of James Hahn who was appealing in denial of a heliport license.

4/85 General Counsel Parker also attended a working seminar on Office of Management Budget Circular A-76. This is an important area in HAI's ongoing efforts to reduce government competition with private enterprise.

5/85 The Board of Directors met in Fort Worth, Texas with excellent results including: approval of HAI's operating budget for the 1985-86 fiscal year; the acceptance of 13 Regular Members; establishment of price structure for the 1986 Annual Meeting registration; a new Annual Awards presentation format; and further development of a professionally managed fund drive for the Helicopter Foundation International.

5/85 The following HAI Committees met and completed important work: Acoustics, Economics, Economics Task Force, Manufacturers, Public Relations, Advisory and Safety.

6/85 President Frank L. Jensen, Jr. made a presentation on helicopters at the Annual Meeting of the Institute of Navigation (ION) where he accepted ION's achievement award for 1984 on behalf of Dick Smith, an HAI member.

6/85 HAI contacted the U.S. Department of State and the International Civil Aviation Organization on behalf of members operating helicopters in support of oil operations in the Naverin Basin where Soviet aircraft were creating a hazard with low-level overflights. The Soviet flights have ceased.

6/25/85 The HAI Exhibits lottery was held to assign booth spaces. A total 140 contracts requesting 488 booths were received—a 25% increase in exhibitor's from the previous year's lottery.

7/85 President Jensen and General Counsel Parker met with Senator Pete V. Wilson (R-California) to discuss termination of the California Department of Forestry's continued lease of 12 surplus UH-1Fs.

7/85 Chairman Charles W. Johnson and President Jensen attended a meeting of the Helicopter Safety Advisory Committee in Houston.

8/85 The Association congratulated and expressed appreciation to Susan L. Danker, Director of Member Services, upon her completion of five years' service with HAI.

8/10/85 HAI officially moved from Washington, D.C. to its newly-constructed Association-owned headquarters at 1619 Duke Street, Alexandria, VA. The move was accomplished over a weekend, with minimal disruption of productivity.

8/85 HAI's Leister also made a presentation in Montreal at a seminar organized by the Canadian Ministry of Transport, and the United States FAA.

8/85 The call for nominations for the 1985 Annual Awards was mailed to HAI members and the media.

9/10–12/85 Before attending a combined Fourth Annual Reception and housewarming, the HAI Board of Directors met in the Association's newly-purchased headquarters building in Alexandria, VA. More than 175 guests attended the reception/housewarming including past HAI presidents, government and aviation officials and the media. The Board toured the new headquarters and met with HAI staff the day after the reception.

9/85 The Helicopter Foundation International's fund drive was officially started. Following a session with the Board of Directors, a brochure and other material were developed and mailed to the HAI leadership to assist them in attaining contributions.

10/85 President Jensen attended a White House Rose Garden ceremony in recognition of the Grace Congressional Caucus. President Ronald Reagan officiated, and the entire Cabinet and some 50 members of Congress were present along with 50 invited guests.

10/85 HAI's Leister spoke at a Pittsburgh City Planning Commission Public Hearing on support of a heliport in that city.

10/85 President Jensen and Chairman Johnson attended the semi-annual meeting of GENAVAC, the General Aviation Advisory Committee, an informal coalition of the elected chief staff officers of the General Aviation Associations.

10/85 Kenneth W. Woolnough, HAI's Director of Safety and Technical Programs, computerized the Operator Safety awards for 1984. These awards are current, and there is no backlog.

10/85 General Counsel Parker participated in a space law seminar and submitted a proposal that the American Bar Association's (ABA) Air and Space Law forum focus its next semi-annual meeting on legal issues facing helicopters and heliports.

10/85 The ABA Section of Corporation Banking and Business Law appointed General Counsel Parker Chairperson of its Trade Association Subcommittee.

11/20/85 The HAI Awards Committee met in Forth Worth, Texas and selected finalists for the Association's prestigious Annual Awards.

11/20/85 The HAI Nominating Committee concluded its functions for 1985 by developing an official slate of candidates for election to the Board.

11/85 A schedule was developed for the 1986 meetings of the Board and Executive Committee.

11/85 HAI's Woolnough attended a meeting of the University of Southern California's Aviation Advisory Board.

11/85 General Counsel Parker attended an annual seminar of the Inter-American Bar Association, and testified on behalf of HAI member Max Coombs in a case of industry-wide interest.

11/85 The Executive Committee and the Safety Committee met in Anaheim, California, and completed full agendas.

12/85 The Association continued installation of its new Leading Edge computer system. The Leading Edge has been ranked #1 by consumer reports.

12/85 HAI's Jensen and Leister testified at a public hearing in Alexandria, VA., in favor of a public-use heliport in that city.

12/85 President Jensen was an honored head table guest at the 1985 Wright Memorial Banquet. Others at the head table included Vice President George Bush, and several U.S. Senators and Representatives.

Helicopter Association International Annual Review

Chairman's message

Shortly, I will complete my term on your Board of Directors, and as HAI's last elected President and first Chairman and Chief Executive Officer. Without question, these four years have been challenging, sometimes frustrating and time-consuming, but, most of all, rewarding in the direction I feel the Association is now heading.

With your support, we have marched through a period of industry depression and arrived with general understanding of the HAI's original charter. We have established permanency with the occupancy of our new, "owned" home in Alexandria, Virginia. We made it through a year of questionable finances without borrowing; repaid a deficit of the previous years; and ended up with an operating surplus!

Considerable staff time was consumed in building construction, financing, moving and reorganization. Concurrent with this, HAI staffers were active in reducing operating costs, promoting heliport development, monitoring regulatory matters and product liability legislation, stalemating government encroachment, and many other areas affecting our day-to-day operations. I commend them for the many accomplishments, and thank them for the long, productive hours they contributed.

We look forward to an even more productive year for our industry with many of the "housekeeping" chores behind us. I urge you to assist in completing the many projects which will be generated, and to work towards increasing our operating membership.

Most of all, I urge all operators, commercial, corporate and public service, to recognize that even though we will always have differences, the key goals of the Association will never change...to increase safety, to reduce operating costs and to insure that regulatory and community matters are addressed in a manner appropriate to our industry.

Charles W. Johnson

Legal and Administration

Steffanie D. Parker, *HAI's General Counsel and Director of Legal/Administration, joined the Association in 1983. In 1984, when the legal and administration functions were merged, she assumed her present duties.*

Ms. Parker has a law degree from the California Western School of Law, a Master of Laws degree in International Law from the University of London, and an Air and Space diploma with merit from the London World Affairs Council. In 1976, as a helicopter operator, she completed the Helicopter Association of America Management Course.

At varying times during the period 1964 through 1975, Ms. Parker was promoter, director, officer and manager of Parkair, Inc., a third-level air carrier in Alaska. She represented the company at Route and Enforcement proceedings before the Alaska Transportation Commission, and initiated action before the Civil Aeronautics Board.

She was a Critic for HAI's Annual Management Course from 1976 to 1981, and she was Lead Articles Editor of the California Western International Law Journal. She is a member of Who's Who American Colleges and Universities.

Ms. Parker is admitted to practice law in the District of Columbia, Alaska, California, and before the Federal Courts.

As reported to you in the *1985 Helicopter Annual,* monitoring cash flow and holding expenditures within budget were given priority in the Legal and Administration Department. With unbelievable effort by all HAI staff, and full cooperation of the elected leaders, we succeeded. Considering all sources and uses of funds, the HAI operated in the black during fiscal year 1984/1985.

Additionally, the Department administered the construction and computerization of the new HAI Headquarters. Each room is equipped with a mirco computer, and is connected to a service processor. This arrangement enables HAI, using an accounting package written into a data base manager, to integrate its accounting and membership data base. HAI's Safety Office can develop statistics and has access to external statistical data. The badges you are wearing at the Annual Meeting were printed in-house from the system. The entire staff is served by this system's versatility.

The objective of the system is to reduce administration time without compromising the product. The time and resources saved can then be used to increase member services. Specifically, more effort can be made to obtain heliports and influence the legal environment in which the helicopter operates.

This past year, the Legal side of the Department filed three *Amicus* briefs on industry-wide issues in support of HAI members; submitted a proposal to the American Bar Association (ABA) for a forum on heliports; and established an ABA subcommittee to address trade association legal issues.

HAI entered a Pennsylvania case supporting member James Hahn in an effort to change Pennsylvania case law regarding heliports. Presently, case law permits a community to arbitrarily exclude all helicopter activity throughout the entire community. The appellate court ruled to perpetuate the existing law. The case is now before the Pennsylvania Supreme Court on a Petition of Certiorari. (A request to be heard).

On December 2, 1985 HAI appeared before a Florida Court on behalf of member Max Coombs, who had been convicted of a felony for careless and reckless operations of a helicopter by virtue of landing over a lake and hover taxiing to his yard for touch down in compliance with all Federal Aviation Regulations. We now await a decision overturning that jury verdict.

In a San Diego case, HAI supported a member in a FAR 91.79 minimum flight charge. HAI entered to restrict a growing misinterpretation that helicopters are subject to FAR 91.79 when making a landing if that landing is not "necessary."

In 1985/86 the Departments' goal is to double the legal effort dedicated to making the macro environment more conducive to safe and successful helicopter operations.

Member Services

Susan L. Danker, *HAI's Director of Member Services, has been a member of the staff for five years. She began in the HAI Safety Department in 1980 as an administrative assistant.*

In 1981, Ms. Danker was promoted to Meetings Administrator and assisted the Director of Conventions in all aspects of the HAI Annual Meeting & Industry Exposition. In 1983, Ms. Danker became the General Show Manager for the Annual Meeting.

She was promoted to Director of Member Services in 1984. In her present position, Ms. Danker supervises the Membership and Communications offices in addition to her Annual Meeting responsibilities.

Ms. Danker's professional affiliations include the National Association of Exposition Managers, and the American Society of Association Executives.

Before joining HAI, Ms. Danker worked in retailing as an interior decorator. She graduated cum laude from Ohio University with a degree in Psychology.

37th Annual Meeting and Industry Exposition

The 37th Annual Meeting and Industry Exposition held last January in New Orleans, Louisiana, marked the first time the meeting was held east of the Rockies. The theme, "Helicopter Operators...Vital and Versatile," was an appropriate message for the commercial helicopter operator—that new ideas for using a versatile machine need to be explored and acted upon if the industry is to survive the current economic recession, particularly in the offshore oil market.

During the three-day exposition, HAI welcomed 8,300 professional registrants and 4,000 local Louisianans on "Helicopter Day" for a grand total of 12,300 attendees. Although these figures were down slightly from last year, the HAI maintained its reputation of sponsoring the largest international forum devoted exclusively to the civil helicopter.

A new record was set with 264 exhibiting companies occupying 804 booths in the New Orleans Convention Center. All of the major helicopter airframe manufacturers brought aircraft to the exposition, from antiques to the latest equipment. Twenty-eight helicopters were on display in the convention center, and eleven helicopters and two fixed-wing aircraft participated in the Flight Line at Lakefront Airport. A total of 500 demonstration flight hours were flown with 1,500 departures and landings.

The 1986 HAI Annual Meeting, which will be held January 26-28, in Anaheim, California, continues the tradition of establishing a theme pertinent to the civil helicopter industry and presenting general sessions related to that theme. One of HAI's key goals for 1985—economic viability—is reflected in the 1986 theme, "Helicopters...Essential and Economical." Focusing on the theme, the sessions will examine issues that are crucial to the helicopter operator—no matter how large or small the operation.

Membership and Communications

The membership and communications offices undertook new programs which reflected HAI's goals for both the industry and the association—organizational stability, economic viability, and acceptance of HAI as the focal point of the helicopter industry worldwide.

To help maintain HAI's reputation as the focal point for the helicopter industry, a new outreach program was instituted. Each day, several HAI staff members randomly telephoned HAI members to obtain feedback on local issues crucial to the operator and on the quality of services HAI was providing to its members. The program is very well-received by the members who are called, and HAI is able to keep abreast of the latest developments in the industry. As a result, the outreach program will continue in 1986.

Reflecting the current economic state of the helicopter industry, HAI strives to ensure its own economical viability. In 1985, a membership marketing campaign was estalbished to increase more helicopter operator members. We are encouraged by the results so far. The overall HAI membership in November 1985 was 1,075—an increase of approximately 4% over November, 1984's figure of 1,037. This program, often overlooked by members, remains one of our chief goals so that we may continue to serve the civil helicopter industry.

One of the efforts we made to improve organizational stability was to establish a new centralized data base with equipment that is easy-to-use and compatible with other end-users. With the new software, we are able to combine the membership, exhibits, registration and accounting files into one data base. The results will be: improved communcations with our members, and the elimination of many unnecessary printing costs.

In conclusion, although the past year has not been an easy one for either HAI or the helicopter industry which we serve, we are encouraged by our achievements and by the successes of some of our members. Let us hope that in 1986, all sectors of the helicopter industry will experience better economic conditions so that the entire industry may regain its strength.

Operations

Glenn A. Leister, *HAI's Director of Heliports and Airways, has been with the Association since 1982. His career includes more than twenty-five years of aviation experience.*

In his present position, Mr. Leister has actively represented the interests of civil helicopters in the three-year efforts of the FAA National Airspace Review (NAR) Task Force and the NAR Executive Steering Committee. He also has been involved with the FAA Air Traffic Procedures Advisory Committee, the Radio Technical Commission for Aeronautics, the Air Traffic Control Association, the American Institute of Aeronautics and Astronautics, the International Civil Aviation Organization, and the American Association of Airport Executives.

He has worked to integrate helicopter and conventional fixed-wing operations at airports, and has developed instrument approach procedures for both heliports and airports.

Mr. Leister holds commercial single, multiengine and helicopter ratings, including instruments in both, and has nearly 6,000 accident-free flying hours. He has an MS degree in Systems Management from the University of Southern California's Institute of Aerospace Safety and Systems Management. He has written a variety of articles and papers, and has appeared in local, national and international hearings and forums to advance the cause of civil helicopters and heliports.

The Operations Departments of the HAI Headquarters are the focal point for most of the technical, aviation and educational programs. HAI committees and Affiliate Associations work directly with the two Operations departments to provide information to federal, state and local agencies. The professional staff in Operations represents a broad range of experience in aviation and civil commercial helicopter operations. Their technical experience is reinforced through frequent field trips and communications with operators on issues affecting helicopter operations. Personal and direct contacts with all types of operators, large and small, enables your operations staff to express your views at the many meetings and forums which afford opportunity for advancement of the civil helicopter industry.

Heliports and Airways

Heliport development is the top priority, and the past year has seen at least one spectacular heliport event happen, and others are well along the way. The first of FAA's four full-service prototype IFR heliports, the Indianapolis Downtown Heliport, opened in May; and by late Fall the heliport had exceeded its first year's financial projections. Congratulations to the Indianapolis Airport Authority and the Indianapolis Heliport Corporation for their determination and success!

There continues to be intense interest in both public and private heliport development—but not all heliport efforts were as positive as Indianapolis'. Continued growth in this area will require more dedication on the part of helicopter operators, pilots, manufacturers and, most importantly, the Affiliate Helicopter Associations throughout the country. Organized effort at the local level, working with community leaders, politicians and decision makers must take greater importance.

Active participation in hearings for heliports, public and private, is key to success in finding a place to land. HAI's 800-page Heliport Development Guide is a comprehensive planning guide and resource reference which helps expedite the processing and approval of heliports. Final action depends, however, on the dedication and action of you and your Associations. The tendency of many major corporations to take a "low-key" approach must end. It is time to ask top-level management in those companies to become more active and supportive of helicopter transportation.

Major progress has been achieved in elevating the importance of helicopter requirements in the air traffic system. Helicopter routes and charts are being developed, and an FAA prototype chart has been developed covering the New York City area. The prototype has very poor resolution, compared with what is possible with existing data bases within the civil and military charts, but it is a start. Hopefully, your inputs will help shape the future for helicopters and enable our segment of aviation to obtain a fair share of the services needed to do our job with greater safety and efficiency.

Regulations

The Association represented its members in the following regulatory activities during 1985:

Certification guide for the smaller (FAR 27) helicopters.

Revision of the Transport Category Certification Guide to insert additional material, including that pertaining to ditching.

Assignment of all helicopter Air Carrier operations to the jurisdiction of FAR 135.

Changes to the operating rules as a result of the Rotorcraft Regulatory Review Program of 1979.

Reorganization of FAR 91 into a more orderly document.

1986 will be an equally active regulatory year with the following projects envisaged:

The need for a minimum crew of two pilots for helicopters which do not incorporate the engine controls on the collective or cyclic sticks.

Improved seat-testing criteria.

Installation of cockpit voice recorders and/or flight data recorders.

Airworthiness standards for advanced V/STOL rotorcraft, i.e., tilt-rotor, etc...

Noise certification.

Shoulder harnesses on all passenger seats.

Crash-resistant fuel tanks and systems.

Revised airframe airworthiness standards emanating from the Rotorcraft Regulatory Review Program of 1979.

Rotorcraft structural fatigue and damage tolerance.

Uncontained turbine burst protection.

Classification of on-shore and off-shore airspace.

Update of Subpart B, FAR 91.

Safety & Technical Programs

Kenneth W. Woolnough, *HAI's Director of Safety and Technical Programs, has been on the Association's staff for three years. Mr. Woolnough began his helicopter career in 1966 in the U.S. Army flight school, and he attended the Army's Aircraft Maintenance Officers' Course and Chinook transition.*

He served five years active duty, including one year in Viet Nam, where he flew aircraft recovery and maintenance test flights. He left the Army with the rank of Captain in 1971.

In 1978, he joined a commercial operator where he flew a wide variety of missions from EMS to External Load operations in Texas and Louisiana.

In 1982, he joined the Association as Safety Specialist. He has completed the University of Southern California's Aviation Safety course. Mr. Woolnough holds an Airline Transport Pilot rating in helicopters and a Commercial Pilot rating in airplanes and has over 3,700 hours flight time. He is also the recipient of the Sikorsky Aircraft Helicopter Rescue Award.

He received his BS degree in Business from American Technological University, and he has completed post graduate studies in business and finance at the University of Texas.

Safety Programs

The HAI Safety Bulletin underwent several format changes to provide more information including cumulative and summary data for the current month and for the year.

The Operator Safety Award for 1984 was "computerized" to enable tabulation of information in ways not possible before.

The Pilot Safety Award was also revised this year. Due to the increased cost of the metal plaques, the award was changed to a handsome certificate suitable for mounting. The metal plaques are still available at a nominal cost. Also available is a lapel pin for the various level awards.

The Telegraphic Airworthiness Service has continued with great success. This service provides telegraphic AD's to our members via First Class mail. Often, the members receive these AD's faster than they get them from the FAA. All members who operate a piece of equipment affected by a telegraphic AD, both U.S. and International will receive a copy of that AD.

The Regional Safety Seminar Program, begun in 1984, has continued to grow. Under this program, if an organization wishes to have a regional safety seminar, the HAI is available to co-sponsor it. We can help in the planning from site selection to preparing the agenda and mailing list. This program has proved very popular with regional organizations. In 1985 the program grew 300% over the first year. 1986 will be an even busier year with plans already in the making for more seminars.

Plans for 1986

Changes in the HAI Safety Manual will be published. This will include several new appendices for special operations.

Publication of a Movie and T.V. Helicopter Safety Manual as an appendix to the Safety Manual will be available for sale as a separate item.

Publication of The Very Basic Helicopter Handbook to help reduce customer pressure on commerical operators to exceed the aircraft or personal limits or violate regulations in the name of customer service.

Back to Basic Program. This program was initiated by the FAA to commence in 1986. Such things as: fuel exhaustion; impact with the ground or objects; and inadvertent IMC are still the primary causes of the so-called "pilot error" accidents. This program addresses these areas.

Technical programs

CFI Revalidation Course. This very popular course was given for the second time just prior to the 1985 Annual Meeting and again, it was an overwelming success. Over 100 people attended, about 5% of whom were not CFI's renewing their tickets but managers in various positions simply keeping up with the latest techniques in instruction flying.

International Management Course VI. This innovative course was given in Brighton, England in October 1985. Students came from Britain, Egypt and Scotland. This course continues to be the most educationally innovative in the industry. Use is made of computers, and the "case study method" to add a "real-world" atmosphere to the course.

Malfunction of Defect Report. This report has been published quarterly due to certain changes in procedures in obtaining the data from the FAA.

FAA/Industry Pilot of the Year and Maintenance Technican of the Year. Each year we participate in this program in order to help select the best qualified personnel for these two very prestigious awards.

Plans for 1986

Malfunction or Defect Report Improvement Program. This will provide a more readable format of the already popular M or D reports than is currently available, as well as resuming a monthly production schedule. In addition, certain summary data will be shown to help identify problem areas.

FAA/Industry CFI of the Year and Maintenance Technician of the Year Award Program. This year (1986) HAI will host this event.

CFI Revalidation Course. This very popular course will once again be held just prior to the Annual Meeting. In addition we are petitioning the FAA to grant a waiver of the two-year time limit on utilizing the Revalidation Course to permit those who attended the course in 1985 to attend and renew their certificates. This waiver is necessary with the course held in February in 1987 instead of January.

International Management Courses. We are planning on two locations for 1986—Singapore and England. Dates and other details will be published at a later time.

The Helicopter Operator Management Course will again be held the week preceding the annual meeting.

The HAI-USC Safety Program Management Course will be held just prior to the annual meeting.

President's message

Frank L. Jensen, Jr., *HAI President, has been with the Association three-and-one-half years, first as Executive Director and now as President. A helicopter pilot since 1955, Mr. Jensen has an MS degree in Aerospace Systems Management from the University of Southern Calfiornia. His aviation experience includes thirty years as an aviator, with commercial ratings in helicopter, fixed-wing, single and multi-engine land, rotorcraft and instruments, as well as certification as a parachutist.*

Mr. Jensen, a veteran of Korea and Viet Nam, retired from the Army with the rank of Colonel in 1974. In 1981, Mr. Jensen was awarded the Department of the Army's Outstanding Civilian Service Medal, and a Department of Transportation Commendation. He owns and flies a Piper Arrow IV.

Dear HAI Member:

Like most effective organizations, HAI now sets realistic and meaningful goals for each year. I am pleased to comment, in this fourth (1986) edition of the Helicopter Annual, that together we achieved HAI's goals for 1985, as they were summarized on page 239 of the 1985 Helicopter Annual.

Let's reflect for a moment on HAI's primary objective, which is the advancement of the civil helicopter industry, and on some of HAI's key goals, which lead inexorably toward the accomplishment of that objective. These key goals are: organizational stability; economic viability; maturity and widely-based acceptance and respect as the focal point of the civil helicopter industry worldwide.

Your HAI, after some peaks and valleys of progress toward the cited goals, is now moving steadily and purposefully toward our mutual objective.

We all agree that our industry is still suffering economically. Clearly, we would like to improve economic conditions, and we do what can be done to assist in that regard. There are no magic answers...just continued hard work and perseverance.

And there are bright spots. Quite a few operators have had truly outstanding success during 1985. Granted, they were the exceptions.

Another bright spot is HAI's newly acquired, permanent headquarters. Using a combination of our regularly committed rental fees, a low interest industrial revenue bond (70% of prime!), and quite a bit of nerve, HAI now is its own landlord. The new building fits HAI's needs quite well, and would cost at least 38% more to purchase today, just 14 months after "closing" and 3 months after occupancy!

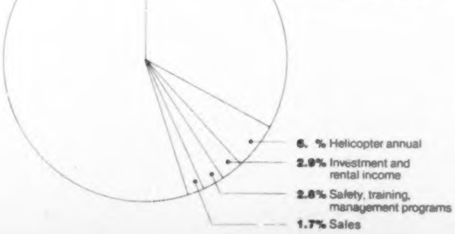
What are HAI's goals for 1986? Quite simply, we must consolidate our gains, without losing our forward momentum, by continuing the intensive management of resources, particularly dollars, and by concentrating on specific, clearly defined and prioritized targets. One program with which we must all identify and fully support is the just officially started fund drive for the Helicopter Archive. HAI has been providing a "home" for this valuable and singular resource for more than two years from HAI's limited resources. This fund drive is intended to raise $350,000, to be invested at interest, providing a perpetual endowment for the Helicopter Archive. This will also relieve HAI of this added burden, which has been particularly difficult during this period of depressed economic conditions for our industry, which of course is felt equally by HAI.

Some other 1986 goals for HAI: continue the efforts to reduce operating costs for helicopters; in cooperation with AHS and others, launch a three-phase user-design program, again concentrating on both short and long-term measures to reduce costs of operating helicopters; and establish better communications between the three categories of civil helicopter operators, i.e., commercial, corporate/private, and public sector. We all use the same machines, and all fly in the same atmosphere. Each must expend energies usefully and productively, rather than in mutually-destructive exchanges in the media and elsewhere.

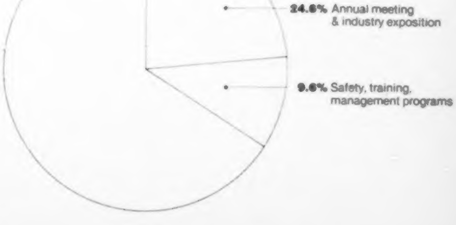
On behalf of your Helicopter Association, I extend best wishes to all, and may you enjoy pleasant and up-lifting experiences throughout all of 1986.

Frank L. Jensen, Jr.
President

Association income



Association expenses



Association programs and structure

A detailed overview of the Helicopter Association International—your association.

The Helicopter Association International (HAI) is the product of many farsighted people and the changing demands of the industry. HAI actually began on December 13, 1948, when representatives of six helicopter operators and one manufacturer met in Burbank, California as the Helicopter Council. The group grew to become the California Helicopter Association, then expanded nationally and internationally to form the Helicopter Association of America, renamed the Helicopter Association International in 1981. The founders laid the groundwork back in 1948 for an association which has grown to become an international forum for enhancing safety, mutual cooperation and aid for commercial helicopter operators.

Currently HAI represents more than 1050 member organizations in 41 nations around the world. The entire industry benefits from HAI's activities, and the open and continuing communications link which it provides.

Objectives & goals

HAI strives to accomplish goals that are set forth by the membership through its elected leaders, the Board of Directors. HAI's primary objectives are:

- Safety in all aspects of helicopter operations.
- Promotion of the helicopter as a safe, practical, reliable and cost-effective form of transportation.
- Encouraging and instilling high standards of professionalism and ethical conduct among members, and providing training for operators.
- Providing an open and continuing forum to serve the helicopter industry.

Organization

Like other truly democratic organizations, HAI is self-governing, The Board of Directors is elected to represent the members.

Any owner, officer or employee of a Regular Member is eligible for election as a Director, and there are no requirements for geographic or national representation. The HAI By-laws do, however, stipulate that there will be six Commercial operators, two Corporate/Private and one Public Service operator elected to serve as Directors. These nine Directors, in turn, select two additional Directors to represent the airframe and engine manufacturers. Special Advisors are appointed as appropriate. HAI's Board is representative of a broad spectrum of the civil helicopter industry. These men and women volunteer their time and creative energy to serve HAI's members.

Committees

Much of the HAI's work is done through committees — a vital function of any association. Manned and chaired by members, the committees aid the Association in evaluating current problems and issues that face the industry. Decisions reached by the committees are approved and then transformed into action by the Board, through the members, with support from the staff.

The range of work done by committees is evident by the committee names: Acoustics, Agricultural, Associate B Members, Commercial Operators, Economics, Emergency Medical Services, Government Contracting, Helicopter Airlines, HeliPAC (Political Action Committee), Heliports & Airways, VFR/IFR Flight Procedures, Manufacturers, Membership, Offshore, Public Relations, Strategic Planning and Technical. Committee listings and summations of 1985 activities start on page 204.

Membership

HAI has four principal classes of members: Regular, Associate, Sustaining/Student and Affiliate. Regular members are companies and other organizations which operate civil helicopters. Associate members are manufacturers of airframes and engines, as well as companies that supply products and services to the industry. Sustaining and Student members are helicopter enthusiasts interested in the industry. Affiliate members are regional or state organizations whose purpose and constituency are similar to HAI's objectives.

The membership structure allows for a rational exchange of information and views between the operator and the manufacturer. While the HAI is operator-oriented, the Board of Directors designates special advisors and representatives for airframe, engine, insurance, public relations, safety matters and international affairs. The Board's structure represents HAI philosophy — to maintain open and effective communication channels between the user and the manufacturer, and between HAI's membership and its elected leaders so the entire industry may benefit and grow.

What does HAI do for you?

HAI provides many services and benefits for its members to promote growth and professionalism in the helicopter industry, including:

- Safety Programs such as seminars, statistics, awards, and a comprehensive safety manual.
- Committee activities with twenty important and active committees.
- Information of value to industry leaders, including newsletters and other publications.
- World's largest helicopter event...HAI's Annual Meeting.
- A focal point for the entire industry.

Annual Meeting & Industry Exposition

In January or February of each year the membership of HAI meets for an exchange of educational, technological and marketing information. The latest in helicopter technology is displayed for all to see. For three days, operators, users, manufacturers, suppliers, flight personnel, technicians and the media join in making HAI's Annual Meeting the largest meeting in the world devoted exclusively to the civil helicopter industry. With annual attendance exceeding 9,000 for each of the past four years, the HAI Annual Meeting and Industry Exposition is a very important event to everyone in the industry.

Annual Meeting sites

Year	City	Show dates
1987	Dallas	Feb. 26–28
1988	Anaheim	Feb. 7–9
1989	New Orleans	Jan. 15–17
1990	Dallas	Feb. 4–6
1991	Anaheim	Jan. 27–29
1992	Las Vegas	March 1–3
1993	New Orleans	Feb. 28–Mar. 2
1994	Anaheim	Jan. 30–Feb. 1
1995	Las Vegas	Jan. 29–31
1996	Dallas (T)	Feb. 22–24
1997	New Orleans	Jan. 19–21
1998	Anaheim (T)	Feb. 1–3

(T) = Tentative

HAI officially opens its Alexandria, VA headquarters

The HAI Annual Meeting & Exposition promotes communication

ROTORgram & ROTORnews

HAI members keep informed on current events in the industry through briefs and feature stories in ROTORgram & ROTORnews, HAI's newsletters. Coverage includes member activities and news, HAI action on issues affecting members, committee reports, regulatory and legislative issues, notices of upcoming events and special reviews of national and international trade shows. ROTORgram is published tri-weekly. ROTORnews, which incorporates a Safety Review section with safety issues and concerns, is published bi-monthly. Members are encouraged to submit articles to both publications.

The Helicopter Annual

Now in its fourth edition, the Helicopter Annual has earned respect and praise from all components of the industry, and from outside the industry as well. In 1983, the American Society of Association Executives (ASAE) presented HAI with the prestigious Gold Circle Award for the premier edition. A comprehensive reference guide to the commercial helicopter industry, the Annual highlights the following chapters: operating statistics; commercial helicopter and avionics specifications; government and industry reference guide; matrix of HAI operators by location and operations; HAI Associate and Sustaining member directories; feature articles and HAI annual report. Published at the Annual Meeting, the Annual enjoys an excellent distribution , including each full registrant, as well as HAI members. It has become an invaluable source of information for operators, manufacturers and government agencies. It is recognized worldwide as a calling card for HAI and its members.

Community relations

Community relations are the key to increasing the public's awareness of the helicopter as a safe, efficient mode of transportation, and HAI is active in promoting the capabilities of the helicopter to potential users and to the general public. All HAI operators receive a copy of *Visibility Unlimited* when they join HAI. This guide is a public communications tool that helps an operator to promote his business locally.

The HAI Fly Neighborly program was established in 1982 as a voluntary noise abatement program for helicopter operators. The program actively addresses noise abatement and public acceptance of the helicopter. Widely popular on both the East and West coasts, the Fly Neighborly program has been enormously successful. Fly Neighborly guides are available upon request.

Prestigious industry awards

HAI recognizes outstanding achievements of helicopter operators and other members of the industry through an Annual Awards program. These prestigious awards are presented during the Annual Meeting and Industry Exposition. The awards are: Robert E. Trimble Memorial for mountain flying; Pilot of the Year; Crew of the Year; Lawrence D. Bell Memorial for significant contributions to the commercial helicopter industry; Max Schumacher Memorial for use of helicopters in urban operations; Hughes Law Enforcement; Helicopter Maintenance; Excellence in Communications; Sikorsky Fly Neighborly for promoting community acceptance of the helicopter; MBB Golden Hour for medevac pilots or operation; and the Raise Your Sites Award for the promotion and development of heliports. HAI Helicopter Operator and Pilot Safety awards for outstanding achievement in aviation safety also are awarded.

Education

Clinics, seminars and symposia organized and conducted by HAI have covered important topics for the benefit of the entire membership, including management education, aviation safety, government contracting and CFI refresher courses. Other topics for seminars are introduced on an as-needed basis.

HAI Safety Manual

An essential document for all helicopter operators, the HAI Safety Manual is a comprehensive volume of the proper safety procedures essential for conducting a safe, reliable helicopter service. The manual is comprised of several sections, including safety programs; company policy and procedures; medical and human factors; accident prevention; survival; and much more. The manual was developed by the Operations Department and Safety Committee at HAI in the belief that reduced equipment downtime, greater reliability and fewer accidents can increase operator revenues and assist in lowering insurance rates. The first copy of the manual is free to Regular and most Associate members. Regular members receive the manual when they join HAI; Associate members must order the manual in writing from the Operations Department.

Safety Management Reference Guide

A complement to the Safety Manual, this guide is a reference document providing explanatory information on how to organize and execute a safety management program.

HAI
Annual Awards Banquet

Awards Banquet is annual highlight

Seminars offer detailed analyses

Malfunction & Defect reports Safety bulletins, & Safety review

Periodically, currently once per quarter, the HAI Safety Office publishes the Malfunction or Defect Report. This report, obtained from the FAA's Service Difficulty Reporting System, shows all the reported component failures on helicopters for that period. While there is a wealth of information in this report, we are attempting to improve its "readibility" and thus its usefulness to our member-operators and manufacturers. In 1986, we also are planning to publish this report on a monthly basis. This service is available to our members and non-members on a subscription basis.

The Safety Bulletins, or PAR's as they are sometimes known, are published on a monthly basis. These bulletins contain the Preliminary Accident Summaries and synopses for a given month along with year-to-date totals in various categories. In addition, the Technical Notes section of the bulletin lists Airworthiness Directives, Alert Service Bulletins, and other safety-related items of interest to our members. This is provided free to members upon request.

Fly Neighborly

The Fly Neighborly Program is being restructured to shorten the seminars, and to include the issues of Heliport Development and Safety. The new briefings are intended to facilitate more regional and local self-help sessions, and will be tailored to two distinct audiences: 1) Pilots and operators; and 2) business organizations, community planners and leaders.

Aviation Policy, Airspace Rules, Air Traffic Control & Flight Procedures

The HAI represents the helicopter operator in the shaping of aviation policy and development of regulatory and non-regulatory Airspace, VFR/IFR Air Traffic and Flight Procedures, and the design of the National Airspace System.

In addition to the monitoring of regulatory actions, it is necessary to review "non-regulatory" activities which ultimately govern flight activities and facilities through the establishment of criteria, handbooks, guidelines and directives that implement various programs. To do this, HAI monitors the activities of both federal and non-federal agencies which evolve standards and policies that eventually impact all operators. HAI also coordinates and works closely with other associations, professional organizations, ad hoc committees and forums which actively cooperate to promote the interest of the aviation community.

Heliport development

Your Association promotes the development of heliports—both public use and private use—by providing information and assistance to planners, community leaders and heliport developers. The HAI Heliport Development Guide, published in 1985, is a comprehensive planning guide and resource reference with more than 800 pages of material to help expedite the processing and approval of heliports. The HAI helps heliport proponents prepare for hearings, and participates whenever time/resources permit, or when unusual situations develop that are likely to affect public heliport development.

Insurance programs

HAI insurance programs address the unique needs of the helicopter operator, while providing the cost-effectiveness of group coverage. HAI offers four insurance programs to its members: Workers Compensation, Loss of License, Aviation License Protective Syndicate (ALPS), and Life Insurance.

License protective sydicate (ALPS)

The ALPS insurance program is a non-medical loss of license plan, not insurance on your license, protecting pilots and mechanics should their certificate be revoked or suspended due to an alleged FAR violation. It also provides skilled administrative defense attorneys and up to a full year's salary. The ALPS program is administered by Delaney Insurance Services.

Life insurance

The HAI Life Insurance Plan is open to any member or employee of an HAI member company. As with HAI's other insurance plans, the life insurance plan provides ample coverage at competitive prices.

Code of ethics

The purpose of the Code of Ethics, on page 202, is to establish certain minimum standards to foster public confidence in the safety of helicopter operations and the integrity of HAI members and to protect the reputation and good name of the helicopter industry.

Regulations

The HAI maintains a high profile for members at the national regulatory level, and frequently renders advice and assistance at the regional or local level to help promote overall standardization. Response to proposed rule makings of the FAA or support of an industry sponsored petition is greatly enhanced when represented collectively by the Association.

The 24th HAI Annual Awards

Outstanding leaders of the civil helicopter industry were recognized at the internationally acclaimed HAI Annual Awards Ceremony, January, 1985 in New Orleans, Louisiana.

Cited below are descriptions of the awards and their deserving recipients.

Pilot of the Year

Recognizes an outstanding single feat performed by a helicopter pilot during the year or extraordinary professionalism over a period of time. Nominees must be active civilian helicopter pilots.

HAI President Charles W. Johnson (center) presented First Officer Marco Cordon (left) and Captain Kenneth Sondrol (right) the 1984 Pilot of the Year Award for the extraordinary skill displayed in saving 10 lives.

Crew of the Year

Recognizes the support and team work of the specialized helicopter crew in performing the various missions of the civil helicopter. Nominees could have worked together on one particular mission or could have worked together in a consistently outstanding manner for a period of time.

Dave Scheytt, pilot (center) and Doug Brown, co-pilot (left), both of Temsco Helicopters, Inc. earned the 1984 HAI Crew of the Year Award for a heroic rescue that saved the lives of two Alaskan state troopers. HAI President Charles W. Johnson (right) presented the award.

Robert E. Trimble Memorial

Robert E. Trimble Memorial

Honors a qualified pilot who is especially distinguished in mountain flying. Attention is focused on the pilot who has displayed exceptional ability and good judgement in high altitude flying and has met some, or all of the following criteria: (1) has provided outstanding service to others, (2) has contributed to high standards of safety and (3) has brought credit and recognition to the helicopter industry.

In recognition of a lifelong standard of excellence in helicopter mountain flying and the exceptional ability to teach and pass on this knowledge to the next generation, Larry Doll of Rocky Mountain Helicopters was awarded HAI's Robert E. Trimble Award for 1984.

MBB Golden Hour Award

Honors an emergency medical services (EMS) helicopter pilot who has most distinguished himself by performing above and beyond the already high EMS standards, and who has made an outstanding contribution to a specific emergency, thereby advancing the helicopter in medevac operations.

Richard Magner (left), of Rocky Mountain Helicopters, received the 1984 MBB Golden Hour Award for his proficiency and skill as lead pilot of the Baptist Hospital Life Flight operation in Pensacola, Florida. Andy Aastad (right), Vice President of Marketing for MBB Helicopter Corporation, presented the award.

Max Schumacher Memorial

Recognizes exemplary service to the helicopter industry through the advancement of the use of helicopters in urban area operations.

Harry McKillop (left) of Pan American World Airways receives the 1984 Max Schumacher Memorial Award from HAI President Charles W. Johnson for planning and developing a viable helicopter airline in New York City.

Sikorsky Fly Neighborly Award

Honors the commendable or significant contributions of those who endeavored to solve a critical helicopter sound complaint or problem. The solution to a community's problem may be weighted more than the solution to an individual's complaint. Those eligible include: helicopter pilots and operators, not limited to HAI members; community groups; regional helicopter associations; business entities, including manufacturers; and federal, state or local governments.

The Arizona Army National Guard was the recipient of the 1984 Fly Neighborly Award for eliminating noise complaints and for building community relations in the Phoenix, Arizona area through the Fly Neighborly program. Major David P. Rataczak (left) accepts the award from Richard G. Stutz (right), of Sikorsky Aircraft and Chairman of HAI's Heliports and Airways Committee.

Lawrence D. Bell Memorial

Recognizes long and significant service to the civil helicopter industry, or sustained exellence relating directly to the industry. The award salutes management leadership. Nominees need not be licensed pilots.

For his unselfish commitment and significant contributions to the civilian helicopter industry, Fred H. Bowen, a pioneer helicopter pilot and founder of HAI, was presented the 1984 Lawrence D. Bell Memorial Award. Mr. Bowen, since deceased, was unable to attend the award ceremony.

Helicopter Maintenance

Recognizes distinguished contributions to aviation safety through significant innovation in design or long-standing excellence in the performance of helicopter maintenance.

For is dedicated and long-standing excellence in the performance of helicopter maintenance Ray Etcheverry of Big Valley Aviation is presented with the 1984 Helicopter Maintenance Award by Charles W. Johnson

Hughes Law Enforcement

Presented for a worthy contribution to the advancement of the crime-suppression concept of helicopter patrol service. Limited to anti-crime patrol service and related activities such as surveillance and pursuit. Nominees are not limited to pilots or necessarily law enforcement personnel. Safety practices are an additional consideration.

For their extraordinary professionalism, skill and safe operations, Jack Real, President and CEO of Hughes Helicopters, Inc. (right) presented the 1984 Hughes Law Enforcement Award to the New York State Police Aviation Unit. Accepting the award is Captain Richard Thomas.

Excellence in Communications

Awarded to a member of the media who has achieved distinction through an outstanding public relations or media contribution to the helicopter industry. Nominees are judged on their creativity and contribution to the industry as a whole. Submission may be in the form of written material, audio presentation, visual program or any material drawn from the communications spectrum.

L. Kim Smith, formerly a columnist with Rotor and Wing International, received the 1984 HAI Excellence in Communications Award from HAI President Charles W. Johnson .

Raise Your Sites!

Recognizes the person or organization that has done the most during the past year to forward and promote the establishment of public-use heliports. Both the award and the recipient will give the industry an opportunity to tell a heliport success story in real-life terms. Those eligible include business professionals, mayors, legislators, planners, architects, chambers of commerce and city councils, among others.

David L. Blackshear (left), Special Services Coordinator, is presented the 1984 Raise Your Sites! Award by HAI President Charles W. Johnson (right). Blackshear accepted the award for the Louisiana Department of Transportation, a co-recipient.

The Illinois Department of Transportation was co-recipient of the 1984 HAI Raise your Sites! Award. Robert L. Donahue (left), Director of the Aeronautics Division, accepted the award from HAI President Charles W. Johnson (right).

Code of Ethics for members

This Association is international and is one which does not contemplate pecuniary gain or profit to the members thereof and is organized solely for non-profit purposes; and any and all assets of the Association are irrevocably dedicated to exempt purposes, as specified in Sections 501-C (3) (Education) and (6) (Business League) of the Internal Revenue Code of 1954, as now existing or hereafter amended, and no part of any net earnings or assets shall inure to the benefit of any member or any other individual. This Association shall have no power to engage other than as an insubstantial part of its activities, in activities which are not in furtherance of an exempt purpose, as defined in said Section 501-C (3) and (6) of the Internal Revenue Code of 1954, as now existing or hereafter amended.

Article I *Purpose*

It is the purpose of this Code of Ethics to establish certain minimum standards in order to foster public confidence in the safety of helicopter operations and the integrity of HAI members and to protect the reputation and good name of the helicopter industry. The Association does not deal with prices, territories or in any manner attempt to restrain trade or free enterprise.

In order to promote these objectives, each HAI member subscribes to the following Code:

Article II *Technical standards*

a. Flight: Flights will be made in accordance with appropriate government regulations. In addition, a member's pilots will exercise their best judgment to ensure a maximum safety factor at all times.

b. Flight personnel: A member will employ and assign to each flight only pilots who hold current certificates of qualification.

In addition, the member shall be satisfied, either through training provided by his organization or by review of the pilot's experience, that flight personnel are familiar with the type of work to which they are assigned and are capable of completing satisfactorily.

c. Maintenance: Maintenance on a member's aircraft shall be performed in a manner that conforms to appropriate regulations. Members will not use parts or materials of unknown origin or time or of doubtful specification. Maintenance personnel shall not approve any aircraft for flight unless they are personally satisfied that the equipment is airworthy.

d. Equipment: A member shall operate any aircraft of his choice, except that every aircraft must be in airworthy condition. In addition, a member will not attempt to use for a given job a helicopter which, because of special conditions—such as altitude, temperature, payload requirement, etc. —is unable to perform the work safely and acceptably.

Article III *Insurance*

Members shall carry liability insurance covering their flight operations in amounts sufficient to provide adequate and reasonable protection to passengers and to the public against liability arising from such operations.

Article IV *Business Standards*

HAI members shall maintain business standards which match the high technical requirements of the industry. While recognizing that it is impossible to enumerate all of the attitudes and factors which comprise good business ethics, members recognize certain areas in which positive principles do apply.

a. Advertising: A member's advertising shall be truthful and shall accurately represent the services he is able to offer.

b. Financial: Since financial stability is the hallmark of a leading company in any industry, members will exert every effort to anticipate their financial obligations and to meet them promptly when due.

c. Sales: In selling equipment or parts, or in selling helicopter services to industrial, government, or private customers, members will present a truthful representation of the equipment or service being offered.

Article V *Implementation*

The HAI recognizes that it has no legal right to enforce the minimum standards outlined above, even though the technical standards have already been formally established by existing governmental regulations. The Association has every right, however, to limit its membership to those who are in sympathy with its objectives.

Therefore, since a procedure for implementing this Code is desirable, the basis for such a procedure will logically hinge upon membership in HAI.

When a person, partnership, corporation, association or other business entity applies for membership in HAI, it is assumed that adoption of the Association's standards is both implied and existent. At some later date, should a member reportedly violate the Association's Code, review of his alleged violation(s) is in order by the Ethics Committee, which will make recommendations to the Review Board.

The HAI Board of Directors is hereby established as a Review Board. The Chairman of the HAI Board shall act as Chairman of the Review Board.

The complainant against the member must present to the Review Board tangible evidence of violation. The defendent shall have every chance to review the charges and to present his side of the case to the Board.

The Board's decision shall be final with regard to disciplinary action when a violation is determined to have occurred. The Board's action may range from issuing a warning to revoking the violator's membership in the HAI (without refund of dues).

Article VI *Modification*

The Code of Ethics outlined herein shall be subject to modification or elaboration as the needs of the industry shall require.

1985-86 HAI Board of Directors

(Front row, from left) Stephen R. Sullivan, Treasurer (Aris Helicopters, Ltd.); Wanda L. Rogers, Vice Chairman (Rogers Helicopters, Inc.); Charles W. Johnson, Chairman (ERA Helicopters, Inc.); Frank L. Jensen, Jr., HAI President; (Second row) Charles L. Andrus, Director (Exxon Company USA); Joseph Mashman, Special Advisor (Consultant); Vernon E. Albert, Director (Petroleum Helicopters, Inc.); (Third row) Kenneth M. Jones, Secretary (Air Logistics); Wesley G. Lematta, Director (Columbia Helicopters, Inc.); (Fourth row) Terry S. Jones, Director (Viking Helicopters, Inc.); Theodore E. Dumont, Special Advisor (Consultant); John N. "Tony" Clark, Engine Representative (Pratt & Whitney Canada); James A. Hamilton, Airframe Representative (Bell Helicopter Textron); (Fifth row) Laurence J. Maloney, Insurance Representative (Frank B. Hall & Company); Joseph C. Gross, Honorary Secretary (Mobil Oil Corporation); Walter B. Comeaux, Jr., M.D., Special Advisor (Flight Surgeon). (Not pictured) S. Duane Moore, Director (Illinois Department of Transportation); Jean Ross Howard, Public Relations Advisor (Aerospace Industries Association of America).

Helicopter Association International

Staff

Executive
Frank L. Jensen, Jr., President

Vernice Y. Robichaud,
Executive Secretary

Legal/Administration
Steffanie D. Parker,
Director of Administration, Legal Counsel

Ann M. Hobbs,
Legislative Assistant

Gwendolyn Walker-Spriggs,
Legislative Secretary

Richard J. Kerch,
Office Manager

Henry J. D'Souza,
Accounting Assistant

Wilhelm Davidson,
Production Coordinator

Member Services
Susan L. Danker,
Director, Member Services

Daniel P. Warsley,
Communications Manager

Amanda Harrison,
Meetings & Exhibit Coordinator

Katherine Miller,
Membership Manager

Operations
Glenn A. Leister,
Director of Heliports & Airways

Kenneth K. Woolnough,
Director of Safety and Technical Programs

Debra K. Schroeder,
Operations Secretary

Tonya Susaraba,
Safety Secretary

1985/86 Board of Directors

Chairman
Charles W. Johnson
ERA Helicopters

Vice Chairman
Wanda L. Rogers
Rogers Helicopters, Inc.

President
Frank L. Jensen, Jr.

Treasurer
Stephen R. Sullivan
Aris Helicopters, Ltd.

Secretary
Kenneth M. Jones
Air Logistics

Honorary Secretary
Joseph C. Gross
Mobil Oil Corporation

Directors
Vernon E. Albert
Petroleum Helicopters, Inc.

Charles L. Andrus
Exxon Company USA

Terry S. Jones
Viking Helicopters, Inc.

Wesley G. Lematta
Columbia Helicopters, Inc.

S. Duane Moore
Illinois Department of Transportation

Airframe Representative
James A. Hamilton
Bell Helicopter Textron

Engine Representative
John N. (Tony) Clark
Pratt & Whitney Canada

Insurance Representative
Laurence J. Maloney
Frank B. Hall & Company

Special Advisor
Theodore E. Dumont
Consultant

Special Advisor
Joseph Mashman
Consultant

Special Advisor, Safety
Walter B. Comeaux, Jr., M.D.
Flight Surgeon

Public Relations Advisor
Jean Ross Howard
Aerospace Industries Association of America

Honorary members*

Individuals who have distinguished themselves to a significant degree through efforts directed toward the advancement or improvement of the commercial helicopter operating industry. Honorary members shall hold membership for life.

Arthur L. Fornoff
Arthur Godfrey
Glenn W. McPherson
L. Welch Pogue
James S. Ricklefs
Igor I. Sikorsky (deceased)

*All past presidents are honorary members.

Past presidents

1948/49/50 James S. Ricklefs
1951-52 Elmer Schlesinger (deceased)
1952-53 Carl F. Brady
1954 Joseph G. Seward
1955 Elynor Rudnick Falk
1956/57 Carl Agar (deceased)
1958 Richard D. Eccles
1959 J. Cullen Weadock
1960 Robert L. Suggs
1961 Hal C. Conners (deceased)
1962 Donald A. Larson
1963 J. Cullen Weadock
1964 Walter N. Attebery
1965 H.C. "Pete" Brown
1966 Robert A. Richardson
1967 Roy K. Falconer
1968 Godfrey A. Rockefeller
1969/70/71 Glenn W. McPherson
1972/73 J. Arlo Livingston
1974 W.B. Rowe
1975 Frank W. Lee
1976 Menno S. Kamminga
1977 Richard A. Wien
1978 Donald L. Sides
1979 Vincent Colicci
1980 Delford Smith
1981 Carl Dougherty
1982 Gian F. Blower
1983 Loran E. Patterson
1984 Charles W. Johnson

Affiliate members

International

British Helicopter Advisory Board
General Aviation Association (Australia)
German Helicopter Association
Groupement Francais de l'Helicoptere
Helicopter Association of Australia
Helicopter Association of Southern Africa

United States

Airborne Law Enforcement Association
Alaska Air Carriers Association
American Helicopter Society
American Society of Hospital-Based Emergency Air Medical Services
Appalachian Helicopter Pilots Association
California Helicopter Operators Council
Eastern Region Helicopter Council
Helicopter Association of Florida
Helicopter Operators of Texas
Helicopter Safety Advisory Council
Metroplex Helicopter Pilots Association
Michigan Helicopter Association
New England Helicopter Pilots Association
Northwest Helicopter Association
Ohio Helicopter Pilots Association
Popular Rotorcraft Association
Western Helicopter Safety Advisory Council

Helicopter Association Committees

Acoustic Committee

The committee work has focused on two studies which are of direct interest to members. The first is the development of the FAA Helicopter Noise Model (HNM) which is expected to be issued in mid-1986 as the counterpart to the airplane Integrated Noise Model (INM) used for airport noise contour modeling. The HNM will help planners, developers, and cities which are currently considering heliports.

Meetings have been held with the FAA to try to avoid overly stringent standards being promulgated at the national level, which often becomes statute at state or local levels.

The FAA is revising the Advisory Circular on Noise Assessment Guidelines for New Heliports (150/5020-2) to include all heliports. The aim is to issue this early in 1986.

These current programs could have a major impact on operators and heliport developers alike. The Acoustic Committee needs more operator input and is seeking additional members to help assess the economic impact, a factor not otherwise being considered by FAA at this time.

The committee has continued to support the Fly Neighborly efforts, to field inquiries on heliport noise matters, and has helped analyze proposed FAA heliport design criteria.

Chairman
Dr. John W. Leverton
Westland Helicopters

Board liaison
Theodore E. Dumont
Sikorsky Aircraft

Staff liaison
Glenn A. Leister
Director of Heliports & Airways

Committee

Charles R. Cox
Bell Helicopter Textron

Srini Nagaraja
Agusta

Dr. D. S. Janaki Ram
Hughes Helicopter

L. Light
Aerospatiale Helicopter

M. Orelup
Allison Gas Turbines

Ronald G. Schegel
Sikorsky Aircraft

H. Sternfield
Boeing Vertol

Richard G. Stutz
Sikorsky Aircraft

John L. Thompson
Systems Control Technology

C. Wilson
AVCO/Lycoming

Agricultural

The purpose of this committee is to aid in the dissemination of information pertinent to the operating rules and regulations of the Federal agencies charged with such responsibilities, amendments to such rules and regulations, dissemination of information pertinent to the introduction, application and use of new pesticides with specific reference to any unique hazards which may exist either to the operator, his equipment, the crop being treated or adjacent properties. It is the further purpose of this committee to keep members notified as to pertinent Appellate Court decisions touching upon aerial application of pesticides and wire strikes.

Chairman
Stuart W. Turner
Stuart W. Turner & Co.

Board liaison
Wesley G. Lematta
Columbia Helicopters

Staff Liaison
Glenn A. Leister
Heliports and Airways

Committee

Robert D. Fox
Evergreen Helicopters

William L. Knight
Rambling Rotors

William "Billy" Rowe, Jr.
Sealand Helicopters

Dr. Carroll M. Voss
AG Rotors

Commercial Operators

Chairman, Board liaison
Charles W. Johnson
ERA Helicopters

Staff liaison
Frank L. Jensen, Jr.
President

Committee

Charles W. Johnson
ERA Helicopters

Wanda L. Rogers
Rogers Helicopters

Kenneth M. Jones
Air Logistics

Wesley G. Lematta
Columbia Helicopters

Stephen R. Sullivan
Aris Helicopters

Vernon Albert
Petroleum Helicopters, Inc.

Economics

Meetings were held with the Economic Task Force in Fort Worth during May in conjunction with the AHS convention. Cost reductions at the manufacturer and operating levels were addressed. The group is working to revise and update the *Guide for the Presentation of Helicopter Operating Cost Estimates* previously published by the AIA.

The committee continues to participate with the Government Contracts committee, and the Executive staff in an on-going battle to eliminate government encroachment in the private sector of helicopter contracting.

Chairman
Robert D. Fox
Evergreen Helicopters

Board liaison
Loran E. Patterson
Blackhawk Helicopters

Committee

David Smith
Air Logistics

Rick Throckmorton
Aspen Helicopters

Vincent Colicci
Helicopter Services, Inc.

Emergency Medical Services

This committee is charged with the responsibility of all matters affecting the operations and standards of HAI members involved in the use of helicopters employed in emergency medical operations.

Chairman
Louis P. Bartolotta, Jr.
MBB Helicopter

Board liaison
Charles W. Johnson
ERA Helicopters

Staff liaison
Kenneth W. Woolnough
Director of Safety & Technical Programs

Committee

Richard Adams
Systems Control Technology

David Andrews
Omniflite

R. R. Borland
Bell Helicopter Textron

Dr. Christian Buehler
Swiss-Air Rescue

Howard M. Collett
Aviation Hospital Consultants

Dr. Walter B. Comeaux, Jr.
Petroleum Helicopters

Dr. Richard B. Donker
Memorial Hospital/Medical Center

Roy Evans
National Flight Nurses Association

Don Gamble
North Slope

Donald P. Groenemann
MBB Helicopter

Sam M. Hewitt
Tracor Aviation

Michael A. Holtsclaw
Rambling Rotors

John Hopkins
Hospital Airtransport Systems
Portland Hillsboro Airport

Jeremy Labuschague
Court Helicopters

Frederick V. Martin, Jr.
Agusta Aviation

Nina Merrill
ASHBEAMS

S. Duane Moore
Illinois Department of Transportation

Major Gary Moore
Airborne Law Enforcement Association

Roy L. Morgan
Air Methods

John R. Murphy
St. Louis Helicopter Airways

Gary D. O'Conner
Evergreen Rotor Aids

Lt. Rick Oliver
Sonoma County Sheriff Department

Chief Carlos Perez
Dade County Fire Department

Dr. Thomas Poulton
Creighton University

Dan Reich
St. Anthony Hospital

William Rheams
Air Logistics

Larry Pietropaulo
Aerospatiale Helicopter

Ronald Shackleford
Arizona Department of Public Safety

Robert Thydean
Air Services International

Timothy G. Wahlberg
Evergreen International Airport

Dr. John Zuk
Ames Research Center, NASA

Government Contracting

The Government Contracting committee has been active this year in its endeavor to identify and pursue areas of concern in government contracting and subsequent effects on private industry.

Chairman
Rod Kvamme
Heli-Jet

Board liaison
Wanda L. Rogers
Rogers Helicopters

Staff liaison
Steffanie D. Parker
Legal and Administrative
General Counsel

Committee

Walter Barnard
Evergreen Helicopters

William T. Browder, Alternate
Geo-Seis Helicopters, Inc.

Joseph W. Green
El Aero Services, Inc.

Daniel J. Hawkins
Hawkins & Powers Aviation, Inc.

Lloyd Heckmann
Pumpkin Air

Carl Milko
Summit Helicopters

Robin Rogers, Alternate
Rogers Helicopters

Dean Shealy
Crescent Airways, Inc.

Bill Wells, Past Chairman
Cascade Helicopters

Helicopter Airlines (HAL)

The Helicopter Airlines committee (HAL) works with the Helicopter Airlines Association on issues affecting HAI's Helicopter Airline constituency. The two groups have identified cooperative roles in addressing the economic and promotional interests of helicopter airlines services. The committee is evaluating past events and refining the concepts that are likely to be the foundation for helicopter airlines today and in the future.

Co-Chairman
John A. Cameron
Consultant

Matthew Zuccaro
Resorts International Airlines

Board liaison
Joseph C. Gross
Mobil Oil

Staff liaison
Glenn A. Leister
Director of Heliports & Airways

Committee

Vernon E. Albert
Petroleum Helicopters

Richard S. Armstrong
Mid-State/Executive Helicopters

Peter Bales
Omniflight Airways

Ralph Banks
Cal West Helicopters

Don Barbour
Bell Helicopter

Paul Beaver
Shephard Press

Steve Berando
Hoyle, Tanner & Associates

W. Vernon Daley, III
Helicopter Flights

Dave Eagleston
Pumpkin Air

Steve Fern
Hawaii Pacific Helicopters

Dean Hanson
S.F.O. Helicopters

Donald P. Groenemann
MBB Helicopters

John Hoffman
Airlift Associates

Larry Marini
Crescent Helicopters

Dr. Michael Mark
Executive Airlink

William J. Marlin

Sam Mayar
Boeing Vertol

Harry McKillop
Pan American World Airways

John E. Meehan
Pan Am World Services

Vic Miesinger
Colorado Airways

Mackie D. Mott
Sikorsky Aircraft

Gordon J. Myers
Sky Cab

Gary O'Conner
Evergreen Helicopters

Richard J. Peterson
Westland Helicopters

Reed Phillips
Tropical Helicopter Airways

Noel G. Preston
Aviation Consulting

Fred Salitore
Aerospatiale Helicopter

Martin Schnabel
New York Helicopter

James E. Skinner
Aviation Daily

William S. Stamer
Chicago Airlink

Bruce Stoehr
Omniflight Helicopter Services

William Ter Keurst, Jr.
Tropical Helicopter Airways

Don Toler
Rotor & Wing

O. Ray Wall
A.M.S.I.

Clark Wirthlin
Hughes Helicopters

HeliPAC

The HeliPAC committee is concerned with political candidacies in all states.

Chairman
Vincent V. Colicci
Helicopter Services, Inc.

Board liaison
Wanda L. Rogers
Rogers Helicopters, Inc.

Staff liaison
Steffanie D. Parker
Director of Administration
General Counsel

Heliports and Airways (HAC)

HAC has worked on the analysis of the second and third drafts of FAA's proposed Heliport Design Manual. Although some progress has been made to date, there are serious concerns with the economic impact on a drastically revised document that is likely to be misinterpreted by city and state planners. A number of human factor issues remain unresolved, and the committee is expected to work toward a reasonable compromise in early 1986.

HAC's Fly Neighborly Steering committee is restructuring the Fly Neighborly Program as described earlier in the HAI section, to include Safety and Heliport Development to promote greater public acceptance. Affiliate associations are encouraged to sponsor seminars and promote the new Fly Neighborly concepts to help achieve greater public acceptance at the local levels. The HAC seeks more operator participation in its deliberations, and efforts will be made in 1986 to identify Affiliate heliport representatives to strengthen heliport and public acceptance initiatives.

Chairman
Richard G. Stutz
Sikorsky Aircraft

Board liaison
Stephen R. Sullivan
Aris Helicopters

Staff liaison
Glenn A. Leister
Director, Heliports & Airways

Committee

Roger Brownlow
Fluor

Felton M. Baker
Houston Helicopters

R.A. Balzer
Boeing Vertol

Francis J. Curnow
Sikorsky Aircraft

Michael S. Davenport
Pacific Lumber and Shipping

Donovan Harvey
Bell Helicopter Textron

Jack Hester
Capitol City Airport

Woody Hoffines
Aerospatiale Helicopter

Jean Ross Howard
Aerospace Industries Association

Frank L. Jensen, Jr.
Helicopter Association International

Ken Johnson
AVCO Lycoming

Dr. Deanna S. Kitay
Aeronautical Interests

Dr. Domenico LaSorsa
Agusta Aviation

David Lawrence
Sikorsky Aircraft

John Leverton
Westland Helicopters

William J. Marlin

John E. Meehan
Pan Am Metropolitan

James V. Mottley
Federal Aviation Administration

L.R. Moxam
Westland Helicopters

Sonny Najera
ADOT

Ron Reber
Bell Helicopter Textron

Stephanie Slavin
Aviation Business Consultants

Archibald A. Smith II
Connecticut Air Service

David O. Smith
Air Logistics

William A. Stamer
Executive Helicopter

Diana Stuart
Sperry Flight Systems

Stephen R. Sullivan
Aris Helicopters

John Thompson
SCT

Tirey K. Vickers
Journal of Air Traffic Control

Richard Ware
Illinois DOT

J. Cullen Weadock
Omniflight

D.M. Willis
Hughes Helicopters

Peter Wright, Sr.
Keystone Helicopters

IFR/VFR Flight Procedures

Members of the Committee and HAI staff worked to safely and efficiently integrate helicopter operations into the national airspace systems. Activities include procedures, routes, charts, communications, low level navigation systems and the resolution of flight operations problems. The committee seeks additional active pilots, instructor pilots and flight examiners who are willing to review proposed Airmen and ATC procedures and to make improvements to enhance the safety and efficiency of helicopters.

Chairman
John Dempsey,
Columbia Broadcasting

Board liaison
Charles W. Johnson
ERA Helicopters

Staff liaison
Glenn A. Leister
Heliports and Airways

Committee

Vernon Albert
Petroleum Helicopters

Robert Culver
ERA Helicopters

Francis J. Curnow
Sikorsky Aircraft

Donovan L. Harvey
Bell Helicopter

Nicholas D. Lappos
Sikorsky Aircraft

Donovan V. Mott
ARIS Helicopter

Daniel E. Norman
LIFESTAR

Tom Solat
CBS

Robert Wehr
Aerospatiale Helicopter

Craig Wheel
E. I. Dupont Nemours and Company

Manufacturers

The Manufacturers Committee continued to concentrate on the objective of reducing operating costs, along with its regular, on-going activities.

One particularly noteworthy event was the HAI Manufacturers Committee's Automatic Engine Trend Monitoring Conference which was held in Arlington Texas, November, 1985.

More than 85 persons, specifically knowledgeable in either the requirement side or the capability side of the engine trends monitoring equation attended this important session. A full report is forthcoming.

This committee also continued to cooperate with the other HAI committees, notably the Economic, Safety and Technical Committees.

Co-Chairmen, Board liaison
John N. Clark
Pratt & Whitney Canada

James A. Hamilton
Bell Helicopter Textron, Inc.

Staff liaison
Susan L. Danker
Director of Member Services

Committee
Andreas Aastad
MBB Helicopter

Robert Barlowe
Sikorsky Aircraft

Robert H. Gladwell
Westland Helicopters

R. Frederick Harvey
Allison Gas Turbine

Philip R. Boob
Avco Lycoming,
Williamsport Division

James N. Krebs
General Electric

Martin Less
Avco Lycoming,
Stratford Division

Ing. Bruno Lovera
Agusta (Italy)

Joseph Mallen
Boeing Vertol

Gerald Pertica
Turbomeca

Frank D. Robinson
Robinson Helicopter

Gordon F. Page
Rolls Royce

Harry Wetzel
The Garrett Corporation

Max Wiley
Hughes Helicopters

George B. Rohman
Enstrom Helicopter

Teruaki Yamada
Kawasaki Heavy Industries

Membership

The HAI Membership Committee is in its formative stages. It has been created to provide regular, voluntary attention to the recruitment and retention of members.

The Association hopes the Committee will fulfill these goals in 1986, and asks that the membership share in the efforts required to achieve that success.

Chairman
Terry Jones
Viking Helicopters, Ltd.

Board liaison
Terry Jones

Staff liaison
Frank L. Jensen, Jr.
President

Offshore

The primary purpose of this committee, as dictated by its founding members, was to share information relative to worldwide offshore activities with the aim of promoting the highest degree of safety within the helicopter industry. The committee is currently in the process of reorganization to move forward to create a productive committee that actively serves the membership.

Chairman
Walter McKeown
Exxon USA

Board liaison
Joseph C. Gross
Mobil Oil

Staff liaison
Kenneth K. Woolnough
Director of Safety & Technical Programs

Committee

Pat A. Aldous
Okanagan Helicopters

Jan Bengston
Helicopter Service

Gian F. Blower
Elitos Helicopter

H. C. Brown
Petroleum Helicopter

John Brown
Atlantic Richfield

Richard Brown
Shell Aircraft

F. Lynn Clough
Tenneco

A. C. Gordon
Bristow Helicopter Group

L. Carey Howard
Mobil Oil

Charles W. Johnson
ERA Helicopters

J. C. Jones
Sealand Helicopters

Jeremy Labuschague
Court Helicopters

W. L. McKeown
Exxon USA

Wilbur O'Brien
ERA Helicopters

John C. Ross
Esso Australia

Charles Schmitt
Heli-Union

David O. Smith
Air Logistics

Fred Snell
Columbia Helicopters

Jerry E. Whitman
Shell Offshore

Public Relations Advisory Council

This Council continued to work toward improving HAI's relations with the media and the general public's understanding of the benefits to communities from the operation of civil helicopters.

PRAC met twice this year to review the needs of the Association's public relations efforts and took the following specific actions, among others:

- Re-defined the criteria for the Excellence in Communications award and reduced the number of the awards categories to Broadcast, General Magazines, Trade Journals and Newspapers.
- Following the highly successful 1985 Public Day at the annual meeting in New Orleans, strongly recommended that a free Public Day be held in Anaheim, California on Sunday, January 26, 1986 from 11 a.m. to 3 p.m.
- Recommended a new format for the HAI Awards ceremony to shorten the program without lessening the recognition due to award winners and sponsors.
- Recommended the Press Room at the annual meeting be delegated to PRAC members' companies alphabetically; that the press be encouraged to pre-register ; and that on-site registration be in the Press Room to eliminate delays in registration.
- Many PRAC member companies again joined in sponsoring the Fourth Annual HAI Reception.
- Agreed that a nationwide public relations program be developed to counteract the negative image of helicopters in the media and the lack of public understanding and acceptance of heliports and helicopters. Recommended that this be a combined program of the American Helicopter Society and HAI.

Chairman, Board liaison
Jean Ross Howard
Aerospace Industries Association

Vice Chairman
Ralph Wortmann
The Garrett Corporation

Staff liaison
Dan Warsley
Communications Manager

Committee

Louise Boutin
Pratt & Whitney

Michael Farlan
Rolls-Royce Limited

Randy Furtick
Soloy Conversions

Carl L. Harris
Bell Helicopter Textron

Bruce Jay
Boeing Vertol

Holly Latham
Evergreen Helicopters, Inc.

Robert W. Mack
McDonnell Douglas Helicopter Co.

Robert Metzger
MBB Helicopter Corporation

Donald G. O'Brien
Allison Gas Turbine

Ralph Petragnani
Aerospatiale Helicopter

Robert Salvucci
General Electric

Louis P. Savenelli
Avco Lycoming

John M. Slattery
Helicopter Foundation International

John Snelling
Westland Helicopters

Robert Stangerone
Sikorsky Aircraft

Norman Teisch
Teisch Communications Company
(Representing Air Logistics)

Ernie Tyler
Avco Lycoming

Public Service

The Public Service Committee continued in a caretaker position in 1985. We have and will continue to act as liaison for our various members, assisting them in gaining needed information along with budget justification information when possible. As the economic picture continues to improve we will return to the programs as stated in our 5-year Plan of Action.

Chairman
Sgt. Richard M. Wilson
Houston Police Department

Board liaison
S. Duane Moore
Illinois Department of Transportation

Staff liaison
Frank L. Jensen, Jr.
President

Committee
Sgt. Tony Kruczynski
Phoenix Police Department

Regulations

The Regulations Committee, one of the earliest committees formed by the HAA/HAI, is charged with preparing and/or overseeing all Association outputs regarding aeronautical regulation and standards. Due to the broad diversity of subject-matter covered by those activities and the existence of dedicated expertise on certain technical subjects within other committees, the work-effort is divided into "Task Forces" listed below. Any Association member may become active on any Task Force upon notification to the Chairman of the Committee.

Chairman, Board liaison
Theodore E. Dumont
AEROREGS International

Staff liaison
Glenn A. Leister
Director Heliports and Airways

Airworthiness Task Force
F. Banal
Agusta (Italy)

E. E. Cohen
McDonnell Douglas Helicopter Co.

J. F. Grass, III
Boeing Vertol

A. D. Hall
Westland Helicopters

Giffen A. Mark
Bell Helicopter Textron

Robert Jenney
Enstrom Helicopters

Dipl. Phys. H. J. Merklein
MBB Helicopters

Paul R. Powers
Bell Helicopter Textron

Hubert Portet
Aerospatiale Helicopter

F. S. Ricketts
MBB Helicopter

F. D. Robinson
Robinson Helicopter

E. L. Turner
Aerospatiale Helicopter

Robert E. Warren
Sikorsky Aircraft

Yeruaki Yamada
Kawasaki Heavy Industries

Commercial Operations Task Force
(see Commercial Operators Committee)

General Operations Task Force
(under formation)

Acoustics Task Force
(see Acoustics Committee)

Agricultural Task Force
(see Agricultural Committee)

Heliports & Airways Task Force
(see Heliports & Airways Committee)

Safety Task Force
(see Safety Committee and IFR/VFR Flight Procedures Committee)

Technical Task Force
(see Technical Committee)

Safety

In 1985 the Safety Committee continued to follow its safety improvement program; to 1) identify a limited number of the most serious causes for accidents, to 2) prioritize these causes based upon lives lost, injuries and economic impact to owners and users, to 3) develop strategies, plans, and milestone dates to assure an orderly and positive achievement of defined goals and to 4) monitor these programs on a continuing basis and revise as needed.

The safety management seminar sponsored with U.S.C. has been completely redesigned. Demonstrations in the field, as well as classroom instructions will replace the old format. The Certified Flight Instructor Refresher Seminar (CFI) has become a permanent program at the annual meeting. The Pilots Safety Award Program will continue this year. A Helicopter Emergency Life Saver Plan was reviewed and will be incorporated into our safety manual.

Proposed changes to FAR 61 were reviewed and recommendations were made to the Rules and Regulations Committee. The HAI Outstanding Certified Flight Instructor Award of the year was designed and approved. The committee has continued to take a very rigid and firm stand against the use of drugs and alcohol with recommendations submitted to the FAA requesting sterner regulations governing drug use and alcohol abusers.

Chairman, Board liaison
Dr. Walter B. Comeaux, Jr.

Staff liaison
Kenneth K. Woolnough
Director of Safety & Technical Programs

Don Andrews
Rocky Mountain Helicopters

Dennis Bash
ERA Helicopters

William C. Beversluis
A. T. & T.

Warren J. Cadoret
Petroleum Helicopters

Robert Carnie
Reed Stenhouse

James T. Cheatham
Verticare

Loren Doughty
Bell Helicopter Textron

Walter Lamon
Aetna/Cigna Corp.

James Lematta
Columbia Helicopters

James Sanchez
L. A. County Fire Dept.

Technical

This committee has worked on many and varied projects during 1985, ranging from fuel valves to turbine blades, from hydraulic switches to manual revision. The cooperation which has developed over the past few years between the FAA and the manufacturers has allowed this committee to work quietly and efficiently to present problems and often recommendations to the FAA, manufacturers and HAI members.

Chairman
Doug Matthews
L. A. County Fire Department

Board liaison
Joseph Mashman
Consultant

Staff liaison
Kenneth K. Woolnough
Director of Safety & Technical Programs

Sam Brody
FAA Aircraft Certification Division

Richard Eimert
Ramapo Helicopters

Ray Etcheverry
Big Valley Aviation

Bob Lanard
ERA Helicopters

Bob Martin
Petroleum Helicopters, Inc.

Ben Pessin
Consultant

Complete Your Fleet.

If you timed your business trips from *point to point*—including traffic to and from the airport—you'd find that trips of under 350 miles were getting disproportionately long. Adding a helicopter to your fixed-wing fleet can help solve that problem.

But not just any helicopter—the Sikorsky S-76.

The Sikorsky has the speed and range to handle shorter fixed-wing routes. For longer trips, it can get your management to the airport quickly to pick up the corporate jet. And the spacious, quiet cabin helps make travel time *productive* time.

Equally important, the Sikorsky is a *mature* business aircraft. It has the system redundancy, the depth of support and the proven performance you expect in your corporate aircraft fleet. And its cockpit management tools—including dual digital flight control systems and EFIS—can match the most sophisticated fixed-wing equipment in your fleet.

So if your fixed-wing fleet seems incomplete, get in touch with Mackie Mott (203) 386-7600 to find out more about the versatile S-76.

UNITED
TECHNOLOGIES
SIKORSKY
AIRCRAFT

THE BOEING 234. THE HELICOPTER THAT RIGS SET THEIR WATCHES BY.

There's never a glut of time in the offshore oil and gas industry. So to keep operations running like clockwork there's the Boeing 234. There are ten 234s used in offshore operations. They've flown almost four million miles in just four years.

For punctuality, reliability and capability nothing matches the 234 in offshore operations. Records show that the 234 has been available to fly as planned 98% of the time, and operates within 15 minutes of schedule 90% of the time.

The Boeing 234's long-range capability, plus its large cargo and passenger capacities, provide the best support in the oil fields. When time won't wait, it's time for Boeing 234.

For information, contact *Boeing Helicopters, P.O. Box 16858, Philadelphia, PA 19142. Phone 215-522-3560 or telex 845-205.*

BOEING